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EEC to Back Tsetse Fly Control Program

91WE0034A Harare SOUTHERN AFRICAN ECONOMIST in English Sep 90 pp 33, 36

[Article by Geoff Ndhlala]

[Text] The European Economic community (EEC) is backing an ambitious programme to wipe out the tsetse fly in southern Africa where it is the cause of sleeping sickness in humans and the death of cattle. The overall objective of the programme is the eventual eradication of the tsetse fly from a belt covering 322,000 square kilometres in Malawi, Mozambique, Zambia and Zimbabwe.

The programme originated in Zimbabwe to make more land available for agriculture in the densely populated north east soon after independence in 1980. The area falls within the tsetse fly-belt from which the tsetse had been driven out across the border into Mozambique by the successive fly control programmes which started from 1950 onwards. But control measures were suspended during the liberation struggle and the tsetse fly regained its lost ground. By the time of Zimbabwe's independence the tsetse fly had reached Bushu communal lands—about 80 kilometres from Harare and the closest the fly had been to the capital for a long time.

Experts, aware of the cross-border nature of the fly-belt, recognised the futility of confining control measures to one country and sought assistance to establish a regional tsetse control programme. The EEC in 1982 funded a study of the problem by Zimbabwe's Agricultural and Rural Development Authority (ARDA). The study established that the Zambezi tsetse fly-belt extends into Malawi, Mozambique, Zambia nd Zimbabwe. There are four tsetse species in the region with two of them, Glossina morsitans and Glossina pallidipes, occurring in all the four countries; one, Glossina austeni, occurring only in Mozambique; and Glossina brevipalpis, occurring in Malawi, Mozambique and Zambia. It was therefore necessary to involve all the four SADCC (Southern African Development Coordination Conference) countries if the pest was to be effectively brought under control.

However, while the need for tsetse control in the region was apparent, environmentalists in both Europe and Africa were concerned about the possible damage that the use of dangerous insecticides, such as DDT and dieldrin, banned in Europe, could cause in the region. It was therefore agreed that less harmful substances, namely endosulfan and deltamethrin, would be sued in the EEC-funded programme. In addition, the EEC formed the Scientific Environmental Monitoring Group which employs the services of the university of Saarbrucken in the Federal Republic of Germany to ensure the implementation of the programme according to the best possible methods.

In 1985 the EEC-funded Regional Tsetse and Tripanosomiasis Control Programme (RTTCP) was initiated. Based in Harare, it is run by a regional standing committee consisting of representatives of the veterinary departments of the four countries, with Zimbabwe as coordinator. Other members are the regional authorising officer who is also the permanent secretary in Zimbabwe's ministry of finance; the SADCC sector coordinator for livestock production and disease control, who is also the director of veterinary services of Botswana; and the regional coordinator, Mr Desmond Lovemore. The donors are also represented on the committee.

The total funding of ECU22.65 (European Currency Unit) million (US$27.3 million) is administered through five financing agreements—one each for the four countries and one for regional matters. Malawi has been allocated ECU2,484,200 (US$3 million), Mozambique ECU1,500,000 (US$1.8 million), Zambia ECU8,153,700 (US$9.3 million), Zimbabwe ECU6,821,500 (US$8.2 million) and the regional office ECU3,690,600 (US$4.5 million).

Each country is responsible for its own programme, with co-ordination at the regional level. Each country has to undertake research, training, surveys, control operations, maintenance of cattle through the use of drugs and environmental monitoring. The national programme is in two phases. The preparatory phase was concerned with the provision of the necessary information to assess the feasibility of large scale tsetse eradication operations and to permit their implementation in the second phase. This included a study of the distribution of the tsetse fly within the common tsetse fly-belt, the development of improved survey measures for the detection of tsetse at low population densities and the development of improved methodology advocated for eradication of the fly. Also included were the assessment of environmental effects of chemical eradication methods, improvement of operational capabilities of the tsetse and trypanosomiasis control services of the countries concerned and provision of means for the control of tsetse-transmitted trypanosomiasis.

The second phase consists of the eradication of the tsetse fly through aerial spraying and the use of odour-based insecticide-impregnated targets. Under the RTTCP, two programmes have been carried out in Zimbabwe. The first, covering over 4,700 square kilometres near the Umfurudzi Safari Area, began in 1986. It involved aerial spraying with endosulfan insecticide combined with the use of targets treated with deltamethrin and baited with acetone and octenol. By 1988 the tsetse had been eradicated in the area. The second, covering 7,000 square kilometres in the Angwa-Hunyani-Mukumbura area of Mashonaland West, began in May 1988 and is still in progress; but indications are that tsetse populations are declining.

In Zambia, operations have taken place in the Choma-Kalomo and Gwembe areas both in the south. Aerial

spraying over 4,500 square kilometres in the Choma-Kalomo area started in 1987. Indications are that the tsetse has been eradicated from the area. The sprayed area is protected from re-invasion by a barrier of targets. In the Gwembe area, aerial spraying was originally intended but surveys revealed that the tsetse population had inexplicably collapsed as very few flies were found. Now targets alone are being used.

Progress in Malawi has been slow but a target trial is scheduled for the Kasungu National Park, while the security situation in Mozambique inhibits progress.

The RTTCP was originally intended to last for ten years but experts now believe more time is needed. Apart from benefiting the four SADCC countries directly, the scientific know-how gained can be expected to benefit other tsetse-infested areas in the rest of Africa. Research continues to be applied in perfecting the target method, aerial spraying techniques and finding alternative insecticides, all of which will help speed up the eradication of the tsetse.

New Methods to Eliminate Tsetse Fly Noted

91WE0034B Harare SOUTHERN AFRICAN ECONOMIST in English Sep 90 p 37

[Article by Dr. Alex Wilson]

[Text] Ticks and tick-borne diseases such as East Coast Fever are of serious economic implications in almost every country in Africa. Twenty-three species of tsetse fly occupy over ten million square kilometres in 37 African states, placing 35 million people and some 40 million cattle at risk of the disease trypanosomiasis.

In cattle the acute form of the disease is fatal and chronic infection can cause huge financial losses due to poor growth, lowered breeding rates, low milk yields and perhaps most important, a reduction in draught power for cultivation.

A method has now been evolved which in suitable circumstances can control tsetse and ticks in one cost-effective operation.

Ticks are controlled by the application of insecticides, usually by regular dipping which is relatively simple. However, tsetse control is usually a much more complicated matter. The distribution of tsetse in Africa has changed little over the past 70 years in spite of an estimated expenditure of over US$200 million per annum on control and research projects. Control methods have included bush clearance, selective destruction of game, ground spraying with DDT and aerial spraying. The first three are now unacceptable for obvious reasons and although aerial spraying is effective in many situations, it is not only costly but also requires highly skilled design, supervision and planning.

Dr Glyn Vale of Zimbabwe's Department of Veterinary Services and his fellow workers have demonstrated a revolutionary approach to tsetse control which does not harm the environment. It is reasonably simple to put into practice and is flexible in operation. Tsetse flies are attracted to targets treated with the insecticide deltamethrin and the majority of them killed through contact with it.

This concept followed many years of detailed scientific experiments and observation but as with many great discoveries, the basic experiment was relatively simple. In a cave constructed underground in a tsetse infested area, Dr Vale comfortably stabled several cattle. The air around them was released above the ground through vents. Vast numbers of tsetse flies, attracted by the odour of the cattle, were caught in traps positioned at the entrances to these vents. With the co-operation of British scientists, synthetic ox odours have now been developed for use with targets. It has been shown that using this target technology, tsetse fly populations can be controlled or eradicated and the method is being used throughout Africa.

It had previously been considered that if tsetse flies fed on cattle coated with insecticide they would die and thus be eradicated. Unfortunately at the time the insecticides available such as DDT and dieldrin had a short residual effect on the coat of the animal and are now, of course, environmentally unacceptable.

Minute quantities of deltamethrin have since been discovered to be highly lethal to tsetse flies. Zimbabwean field trials have shown that the occurrence of the disease trypanosomiasis was dramatically reduced when the cattle were dipped in the deltamethrin wash Decatix, which is normally used for tick control. The tsetse flies alighted and fed on the cattle but they subsequently died. In this way their numbers were very quickly reduced. This effect has also been proven in scientific experiments. It has also been shown that in areas where there are no dipping facilities a similar effect can be obtained using a concentrated pour-on formulation of deltamethrin, Spoton, which has been shown to have the same lethal effect on tsetse flies as Decatix. Some effect is evident for as long as 70 days after treatment.

Following these experiments, the Zimbabwe government set up a tsetse control trial involving the dipping of 20,000 head of cattle in deltamethrin and the Food and Agriculture Organisation set up a tsetse trial in Zanzibar using the pour-on form of the insecticide. Both trials were successful and it is now considered by Dr Vale and other scientists that where cattle exist in a tsetse fly situation they can be treated with insecticide by dipping or by pour-on. In this way low- cost, attractive, live and moving targets can be used to effectively destroy tsetse populations. Another advantage is that less technological or scientific input is required.

This method is now widely used throughout the tsetse areas of Zimbabwe where there are cattle and the products manufactured in Zimbabwe are being exported for tsetse and tick control trials in Malawi, Tanzania,

Uganda, Kenya and as far afield as Ethiopia, Burkina Fasso and the Cote d'Ivoire.

The Drug Control Council of Zimbabwe has permitted Welcome (Zimbabwe) Ltd. to add the claim "Controls tsetse flies" to the labels of the cattle dip Decatix and the pour-on Spoton which it manufactures. These are the first preparations to be officially recognised for the control of ticks and tsetse flies. It is anticipated that they will bring new hope to cattle owners in many parts of Africa.

ANGOLA

Cholera Kills 26 People in Cuanza Norte

MB2510081690 Luanda Domestic Service in Portuguese 0600 GMT 25 Oct 90

[Text] Cholera has killed 26 people in Cuanza Norte Province's Lucala and Cazengo Districts between 16 and 20 October. This was disclosed by a health source in Cuanza Norte Province on 24 October.

That source also reported that 252 cholera cases were detected between 16 and 20 October. The source noted that lack of hygiene, litter, and drinking untreated water are the cause of the problem.

That health source also reported that health units in Cuanza Norte Province needs medicines such as serum and antibiotics. Without these, it will be impossible to roll back the cholera threat.

KUP Reports Measles Epidemic in Cuando Cubango Province

MB0211125490 (Clandestine) KUP in English to Southern and Central Africa 0941 GMT 2 Nov 90

[Text] Jamba—An outbreak of measles has been reported in the Cuando Cubango provincial capital, Menongue.

Infant mortality is rising dramatically following the outbreak of measles and increased cases of malaria at Menongue Central Hospital.

Informed KUP sources disclosed today that an average of five children aged between two and 10 years have been dying everyday since the outbreak two weeks ago.

Lack of preventive measures such as child immunization coupled with permanent shortages of drugs may have contributed to the frequency of epidemic outbreak in the area, according to residents' claims.

MPLA [Popular Movement for the Liberation of Angola] health authorities at Menongue hospital are reported to be diluting the little antibiotic medicines available in an attempt to cater for the mounting of patients at the hospital. However, there seems to be no improvements in reducing the death toll. According to the sources five cubic centimetres of antibiotics is being diluted to serve up to six patients.

In efforts to escape the epidemic, many parents are taking their children to the countryside for safety.

BOTSWANA

State Reduces Restrictions on Zimbabwean Food Imports

MB1711114690 Johannesburg SAPA in English 0628 GMT 17 Nov 90

[Text] Gaborone—Botswana has lifted more restrictions on the importation of goods from Zimbabwe, following a decline in the outbreak of foot-and-mouth disease in the Gweru farming area.

SABC [South African Broadcasting Corporation] radio reported on Saturday [17 November] that Botswana's director of animal health and food production, Dr Matz Mosienyane, said his department would continue to dip cattle to prevent cross-transportation of the disease until it was completely under control.

Dr Mosienyane said, however, that all processed or hand-treated meat products such as canned meat, skins, and animal feed could now be imported into Botswana on application to the animal health department for an import permit. He said that the importation of red meat and dairy products was still banned.

GHANA

Ministry Bans Movement of Cattle, Other Animals

AB0311215690 Accra Domestic Service in English 2000 GMT 2 Nov 90

[Text] The Ministry of Agriculture has, with immediate effect imposed a ban on the movement of cattle and other four-legged animals into and out of any region. Announcing this at a news conference in Accra today, the deputy secretary for agriculture in charge of livestock, Dr. A.M. Laryea, said the ban has become necessary because of an outbreak of the foot-and-mouth-rot disease in the country. He said the disease, which is believed to have spread into the country about two weeks from Burkina Faso, has already been discovered at Ashama in Accra.

Dr. Laryea said as a check, the movement of sheep, goats, cattle, and pigs is being restricted. He said movement within the regions will be strictly under veterinary supervision. The deputy secretary gave the assurance that the ministry has enough drug to contain the disease within a month provided effective control is maintained. The last time the disease broke out in the country was in 1975.

KENYA

Meningitis Outbreak Kills 20 in Nyanza District

91WE0033 Nairobi KENYA TIMES in English 22 Sep 90 pp 1, 12

[Article by Kenneth Mwema and Michael Otieno]

[Text] The killer disease meningitis has claimed 20 lives in Kehancha Division, South Nyanza District, over the last three weeks, the area MP, Mr Walter Mwita, claimed yesterday. When contacted, the Director of Medical Services, Professor Joseph Oliech, said it was possible that the deaths had occurred. He said some deaths were not being reported to hospitals. Prof Oliech told the KENYA TIMES that a consignment of drugs had been dispatched to the area. He said 250,000 vials of antibiotics, meningitis vaccine and other medication had been sent there to combat the outbreak. Mr Mwita said the outbreak had reached alarming proportions at Ntimaru in Bwirige Location and Kegonga in Nyabasi Location, both in Kehancha Division. "While appreciating the Government's efforts to combat the deadly disease in the lower parts of Nyangoje in Bugembe East Location, I appeal to the Government, through the Health Ministry at Homa Bay to move faster to contain the spread of the disease," the MP said.

The MP said the excuse by the Ministry that there was lack of transport and fuel was unacceptable in a situation where people were dying.

The MP stressed the need for chiefs and leaders to inform wananchi about measures which they could take to stop the spread of the disease.

He disclosed that according to figures released by the Ministry of Health, three people had died in hospital from the disease. He added that a check with local leaders has established that about 20 people have died from the disease.

Mr Mwita said 15 more people had been treated and discharged from various hospitals in Kehancha and elsewhere in South Nyanza.

He appealed to members of the public to report immediately to health authorities any complaints by their relatives of a stiff neck and headache—the symptoms of meningitis.

This, he said, would help to contain the spread of the disease.

Prof Oliech said the epidemic started in Kisii and spread to South Nyanza. "People have to appreciate the long distances the health officials have to travel to get to the affected people in the remote parts of various districts," added Prof Oliech.

He explained that health workers were involved in educating the public in the affected areas. Public health officers were educating members of the public at schools and markets to try and stem the spread of disease, he said.

Prof Oliech said it was important for the public to understand the difficulties faced by his ministry.

He said the Minister for Planning and National Development, Dr Zachary Onyonka, had toured parts of Kisii this week and expressed satisfaction with the work done by health authorities in the affected areas.

Meningitis is caused by a bacterium Neisseria miningitidis or meningococcus and is essentially an inflammation of the membranes covering the brain, the spinal cord or both.

The common symptoms are high fever coupled with severe headaches, a stiff neck, vomiting and shivering. Under severe infection, the patients convulse, become comatose and eventually die.

With the advent of better drugs and diagnostic methods, meningitis is not such a serious threat as it was in the past when it could leave a trail of death in its wake, thus earning the status of a notifiable disease in Africa. But timely diagnosis and prompt treatment will carry the day.

There are many drugs which have proved potent against meningitis, mostly antibiotics and sulphur drugs. A vaccine for the disease is also available. The big problems, however, is that there are many types of meningitis causing agents, three bacteriums A, B, and C with a viral type also.

Thus, the rush for vaccination against meningitis is not a sure way of control. The vaccine is also reportedly more effective in adults than in children thus medical personnel advise that one liaise closely with an expert before going for a vaccination to ascertain the causitive organism.

Meningitis Kills 12, Hospitalizes 26 in Kisii

91WE0038A Nairobi DAILY NATION in English 4 Oct 90 p 1

[Article by Peter Angwenyi]

[Text] Meningitis has killed 12 pupils of the Mugambi Primary School in Kisii District.

Twenty-six other pupils from the same school in the Sengera Location of Ogembo Division are in the Kisii District Hospital.

The disease, according to Chief Richard Mecheo, is spreading to the neighbouring schools of Nyameobo and Nyamasege.

Last Saturday and Friday, a medical team from Kisii visited the area and vaccinated people in eight villages where meningitis deaths had been reported.

The chief and the school's headmaster, Mr Peter Omondi, said the Mugambi Primary had been shut.

"We have now reported the matter to the Kisii District Commissioner and the Medical Officer of Health in Kisii District," the chief said.

Chief Mecheo identified the dead pupils as Ezekiel Ouro (Standard 6), Ronald Bonyi (Std 5), Jared Rogeni (Std 2), Ruth Kasmiri (Std 1), Nyabate Machoka (Std 1), Nyabuga Chabani (Std 1), Josephine Onyancha (Std 5), Daniel Machuka (Std 8), George Munge (Std 8) and Eric Bokes (Std 1).

The headmaster of the Nyamiobo, Mr David Nyakweba, said the population of his school was reducing because parents were advising their children to stay away.

And the headmaster of the Nyamasege, Mr Michael Metobo, confirmed that his school had also been affected by the outbreak. His son is recovering in hospital, he said.

The deaths raise to 55 the number of people killed by meningitis in Kisii in the past one-and-a-half months.

MAURITIUS

Nurses Training, Hospitals Criticized

91WE0016A Port Louis LE MAURICIEN in French 20 Sept 90 pp 1, 4

[Article entitled: "'Nursing Association' Severely Criticizes Minister Gorburdun"; first paragraph is LE MAURICIEN introduction; italicized words published in English]

[Text] In a statement to LE MAURICIEN this morning the *Nursing Association* [NA], a trade union made up of some 3,000 hospital nurses, demanded the complete reorganization of all health-care facilities. Mr. Ramduth Jagoo, the main spokesperson for the NA and secretary general of the Federation of Civil Service Trade Unions, raked the health minister Mr. Jugdish Goburdhun over the coals, criticizing him for his lack of vision and holding him responsible for the deteriorating situation in state hospitals.

At the same time that he strongly condemned medical authorities and hospital planners for failing to come up with a restructuring plan to modernize our hospitals, Mr. Ramduth Jagoo stressed the need for professional training of medical staff, in particular nurses.

The *Nursing Association* cited a lack of medical equipment and adequate personnel, and the calvary endured by thousands of patients who wait for long hours in waiting rooms for doctors.

On the issue of professional training, the union said that the *syllabus of basic training* for nurses was over 20 years old and that a total revision of the course of studies is needed.

"The *Nursing Association* has asked the Ministry of Health to correct the situation and to change the nursing course of studies many times. We see that, so far, the situation has not changed. And that creates a climate of frustration and discontent among the 3,000 nurses," he said.

The NA contended that it was necessary to set up *post-basic* courses in cardiology, psychiatry, and modern surgery, among others, to improve services for patients. According to the *Nursing Association*, a lack of personnel is responsible for the greater problems in health-care facilities today.

"In the current economic context, with Mauritius developing economically, industrially, and touristically, it is unacceptable for health-care facilities to continue to suffer because of poor planning," said Mr. Ramduth Jagoo.

The *Nursing Association* believes that the eventual opening of the Jawaharlal Nehru Hospital will require a sizable medical and paramedical staff. The union thinks that, unless new nurses are recruited, the situation will deteriorate further in the hospitals.

The NA is again suggesting that medical authorities recruit nurses' aides. In the same breath, it stated that there is optimal use of nurses in the different hospitals.

"Many nurses complain that they must perform nontechnical and nonprofessional tasks. The need for this category of workers (nurses' aides) is greater in hospital wards than in waiting rooms," said Mr. Jagoo.

The *Nursing Association* would also like the Health Ministry to explain why medical authorities did not deem it useful to fill the *Regional Nursing Administrator* position, as recommended by the salary commissioner, Mr. Donald Chesworth, in his report.

"We think the *Regional Nursing Administrator* would have helped a great deal to improve coordination and administration of health-care facilities in each region of the country." The union also pointed out that nurses are dissatisfied with their working conditions and salaries.

"We feel it is important to point out that nurses work over 40 hours in hospitals. The *Assistant Nurses, Nursing Officers*, and *Charge Nurses*, among others, are frustrated," he concluded.

The *Nursing Association* will hold a work session with its members this week.

MOZAMBIQUE

Nearly 600 Children Killed by Measles in Cabo Delgado

MB0311111090 Maputo Domestic Service in Portuguese 1030 GMT 3 Nov 90

[Text] An outbreak of measles which hit Namuno and Balama Districts in Cabo Delgado Province this year has

so far killed about 600 children. Radio Mozambique in Pemba has reported that dozens of children die daily of measles and other diseases in the two districts. Citing the administrators of the two districts, Radio Mozambique in Pemba added that the health sectors of the two districts were not able to calculate specific figures for the disease and as such it is believed that the number of victims is higher than the official figure.

Measles Epidemic Kills 54 Children in Anquabe District

MB1911144090 Maputo Domestic Service in Portuguese 1400 GMT 19 Nov 90

[Text] A measles epidemic which broke out in Zambezia village, in Cabo Delgado Province's Anquabe District, killed 54 children and seriously affected another 190 between May and October of this year.

Measles Kill 58 Children in Meluco District

MB1911183890 Maputo Domestic Service in Portuguese 1730 GMT 19 Nov 90

[Text] Measles have killed 58 children in the locality of Mtete, in Cabo Delgado Province's Meluco District, between September and October of this year.

Cholera Cases Rise to 42 in Maputo City

MB3110152890 Maputo Domestic Service in Portuguese 1400 GMT 31 Oct 90

[Text] The number of cholera victims in Maputo City has risen from 37 to 42 in one week. The number of suspected cholera cases has risen from 91 to 121 people. Dr. Joao Leopoldo, Maputo City Health Director, said that the number of deaths is still three. He pointed out that the situation is under control but expressed concern over the spread of the disease in Maputo City.

Health Ministry Says 940 Dead of Cholera Since April

MB0211131490 Maputo in English to Southern Africa 1100 GMT 2 Nov 90

[Text] A total of 940 people have died in the cholera epidemic which broke out in Mozambique last April and it is continuing in some parts of the country.

This figure was given by the Ministry of Health in Maputo, which added that more than 1,450 cases of cholera have been diagnosed since the outbreak of the disease.

Mocuba Cholera Epidemic 'Under Control'

MB0211131890 Maputo Domestic Service in Portuguese 1030 GMT 2 Nov 90

[Text] Radio Mozambique's Quelimane correspondent has learned from the health authorities in Zambezia Province that the cholera epidemic in Mocuba District is now under control.

Our Quelimane correspondent says that the Mocuba rural hospital has diagnosed 558 cholera cases and reported 34 deaths since the epidemic broke out three weeks ago.

Renewed Fighting Drives 13,000 Refugees Into Malawi

MB0311124190 Johannesburg International Service in English 1100 GMT 3 Nov 90

[Text] The French humanitarian organization Doctors Without Frontiers says that renewed fighting between the Mozambican government and the Renamo [Mozambique National Resistance] movement has driven 13,000 refugees across the border into Malawi during the past three weeks.

In a news statement issued in Paris, the organization said that a further 10,000-15,000 people would flee the fighting in the Mozambican province of Zambezia before the end of the month.

It said that it had dispatched an extra medical team to Malawi last year and that it would be sending more reinforcements to deal with the very large flow of refugees to Malawi, which is already host to an estimated 850,000 Mozambicans.

The organization said that refugee camps in southern Malawi were overcrowded and that it was treating 20 new cases of cholera every day.

Nampula Health Chief Denies Iapala Cholera Cases

MB0811205290 Maputo Domestic Service in Portuguese 1730 GMT 8 Nov 90

[Text] Nampula Provincial Health Director Henrique Antonio today denied reports that 24 people died of cholera in Iapala administrative post, Ribaue District. When interviewed by Radio Mozambique, he said that what has been happening in Iapala was an increase in the number of reported cases of diarrhea. The number of deaths and patients taken to hospital is not known by the Provincial Health Directorate.

He added that a Nampula technical health team is going to Iapala administrative post within a few days to assess the situation. Health sources in Iapala cited by Radio Mozambique in Nampula today reported 24 people had died of cholera and another 27 had been taken to hospital stricken with the disease.

Nampula Reports 53 Cholera Cases, Deaths

MB1011121090 Maputo Domestic Service in Portuguese 1730 GMT 9 Nov 90

[Excerpt] A total of 53 cholera cases and three obituaries had been reported in Nampula Province up to the

beginning of November. These three deaths occurred in Malema District and in Nampula city, the provincial capital. [passage omitted]

Health Ministry Lists Cholera Figures

MB1311103990 Maputo Domestic Service in Portuguese 1730 GMT 12 Nov 90

[Text] A source from the Ministry of Health has told Radio Mozambique that Tete city has been free from cholera epidemic since the beginning of the second half of August this year. Until then, the city had registered 799 cases of cholera and 31 deaths.

The source added that no case of cholera was registered in Beira city since 18 September. Accordingly, the registered number of 141 cases and 21 deaths remains unchanged.

In Zambezia Province, two new cases of cholera were resgistered for the first time in Gurue district between 28 October and 3 November. Thus, a total of 1,176 cases and 51 deaths have so far been registered in Zambezia Province, notably the districts of Mocuba, Nicoadala, and Mopeia, as well as in Quelimane City.

In Maputo city, another 15 cases have been registered over the past two weeks. Thus, the number of cholera cases has risen to 57 while the number of deaths remains three.

NAMIBIA

Health Official Details Malaria Casualties

MB1711134090 Windhoek TIMES OF NAMIBIA in English 13 Nov 90 p 3

[Unattributed report: "Malaria—the Fight Is on"]

[Text] Malaria has reached unprecedented proportions, ranking as one of the most prevalent parasitic diseases; bringing death, human suffering as well as economic losses to populations especially in Africa, Africa and Latin America.

This was stated by Dr. S. Amadhila, Permanent Secretary, Ministry of Health and Social Services, when announcing Malaria Awareness Week, 12 - 17 November.

He said the deadly disease which was caused by the mosquito bite had its high season from November to April. "This period marks a most significant increase of mosquitoes and logically the highest incidence of malaria cases," Dr. Amadhila said, adding, "Irrespective of whether one lives in a highly endemic area or not, all Namibians need to be aware of this critical period and to take all necessary precautions against mosquitoes."

He further reiterated 750,000 children died each year in Africa alone. He said in Namibia 15,941 malaria cases were reported as from April 1989 to March 1990.

He added the government spent R[rand]75,000 on aerial spraying of malarious parts of the country which helped in destroying vast numbers of the pests.

The government also used an educational campaign to inform and educate all Namibians about malaria—how it is transmitted, its prevention, signs and symptoms as well as awareness in treatment of victims. Successful control of malaria did not depend on the government alone but on the shoulders of all Namibians, Dr. Amadhila added.

SOUTH AFRICA

Poor Health Conditions in North Revealed

91WE0056 Johannesburg SOWETAN in English 1 Oct 90 p 15

[Article by Mathatha Tsedu: "Shock Health Conditions in Far North"]

[Text] Nineteen percent of all Mozambican refugees who cross into South Africa have malaria, the regional head of the Department of National Health and Population Development in the Northern Transvaal announced last week.

Speaking at a Press conference in Pietersburg, Dr N.G. Crisp said 20 people had died of the disease in the Lowveld and other areas of the Northern Transvaal.

Last year 894 cases of malaria infection were detected among Mozambican refugees who came into the country during 1989.

A total of 673 South Africans were also found to be infected by malaria during the same period, he said.

Crisp said a regional measles vaccination campaign carried out in May this year had revealed that more than half a million children had never been vaccinated against the disease.

Of these, the campaign had reached more than 430,000 children in Lebowa, Gazankulu and areas served by the South African authority.

The success of the programme was also attributable to the high media cooperation in publicising the activities he said.

He said a survey done by his department in the region on 20,162 rural dwellings had revealed that 57 percent had no toilets, while 9 percent had "an unacceptable quality of water."

About 19.5 percent did not have "ready access to water within a reasonable distance," while 13.5 percent of those polled were over crowded with 6.6 percent living in shanty accommodation.

He said an inspection of all black farm schools in the area of jurisdiction had shown that in one area 32

percent of all schools "had no access to water at all," while 50 percent in another area had "grossly inadequate sanitation facilities."

"In order to succeed in promoting a health environment and lifestyle, with the ultimate aim of health inhabitants, it is essential that this basic need be addressed," Crisp said.

Crisp said the region had to deal with 9 first tier governments and 36 local authorities.

These included fully fledged bantustan government such as Lebowa, Gazankulu, KaNgwane and KwaNdebele.

The proliferation of these government and SA authorities sometimes caused friction, he said.

He announced that the focus for the 1991 year will be a campaign to highlight nutrition, growth monitoring and prevention of diarrheal disease.

This will take the form of guidance on breast-feeding and procedure for weaning babies.

An AIDS seminar was planned in conjunction with the AIDS counselling centre in Pietersburg to coincide with the international AIDS Day on 1 December, Crisp added.

Case of Congo Hemorrhagic Fever Confirmed in Kimnberly

MB3110193690 Johannesburg SAPA in English 1751 GMT 31 Oct 90

[Text] Kimberley—The superintendent of the Kimberley Hospital, Dr Johan Theron, has confirmed that a man suffering from Congo haemorrhagic fever has been admitted to the hospital, SABC radio news reported on Wednesday.

Dr Theron said that the man, 62-year-old Mr Apie Maritz of the Farm Kys in the Postmasburg District, had been admitted to hospital on Monday.

Everyone who had been in contact with Mr Maritz had been traced and was being monitored for secondary infection.

Dr Theron said that Mr Maritz, who was apparently bitten by a tick a month ago, was responding well to the treatment.

Mr Maritz is a well-known stockfarmer and champion goat breeder.

Anthrax Spreads Northward in Kruger National Park

MB1411204090 Johannesburg Television Service in Afrikaans 1800 GMT 14 Nov 90

[Text] The outbreak of anthrax in the Kruger National Park has spread further north and infected carcasses were found as far as Punda Maria.

The current outbreak of the disease is regarded as the worst since 1970 when more than a thousand animals died of the disease. According to the latest report, more than 2,000 animals have died of the disease in the humid conditions. Temperatures of up to 38 degrees Celsius have been measured in the reserve and presents more difficulties in attempts to control the disease. After good rainfall in the area approximately three weeks ago, a noticeable drop in the number of carcasses found had been observed.

Infected carcasses are being found further north again where the scarce brand of Liechtenstein cattle were introduced to the area from Malawi.

SWAZILAND

Health Official States Diarrhea Deaths Decreasing

MB0311095790 Mbabane THE SWAZI NEWS in English 3 Nov 90 p 5

[Report by Banele Ginindza: "Diarrhoea Deaths Are Down"]

[Text] The introduction of health motivators and health workers in communities has helped decrease the number of diarrhoea deaths considerably.

This was an observation made by the medical officer in charge of public health Dr Lahla Ngubeni at the close of a nurses' workshop at the Mbabane Government Hospital.

Dr Ngubeni said that since 1989 when the programme was introduced, statistics have dropped from about 60,000 in 1986 to 40,000 per year.

He said this improvement is due to the programmes run by the Ministry of Health to teach nurses various ways in which to deal with diarrhoea cases.

He said it has since been discovered that the salt and water oral rehydration system is not the most efficient method and new methods are being tried out. But it does work towards restoring the body's salts. He said new methods have been tried out.

Dr Ngubeni noted that nurses and health motivators cannot hope to be effective in their teachings if they themselves are not well informed about the matter being discussed.

"This should also be in the forefront of our campaign to convince ourselves first that oral rehydration salts are effective and we should convince the mothers to use them confidently," said Dr Ngubeni.

He said as health workers the nurses should hope that similar strategies be incorporated into the sectors of public service such as environmental health.

Dr Ngubeni reminded the nurses that their first priority is to the community and children.

"Always remember that we have the interest of the African child and mother at heart and you should serve them to the best of your capabilities," said Dr Ngubeni.

Paper Reports Malaria Figures

MB0611085290 Mbabane THE TIMES OF SWAZILAND in English 6 Nov 90 p 28

[Report by Vusie Ginindza: "Malaria Hits Mbabane"]

[Text] Malaria has attacked only 57 people in October and no one has died.

These have been diagnosed from 5,445 samples from Hospitals, Clinics all over the country by the Malaria team in Manzini.

According to Malaria Officer, Mr. Simon Kunene, these are almost the same as those recorded last year same period.

"Last year same time, 53 cases were recorded from almost the same number of samples," he said.

So far seven people have died of the disease since the beginning of this year and deaths were last reported in May.

However, Mr. Kunene said that they are alarmed at the explosion of mosquito population and that once the heavy rains fall, they will tripple and give rise to malaria as they are the vectors.

Mr. Kunene continued to wash his hand on the issue of mosquitoes rampant in Manzini.

"As much as we're determined to eliminate any malaria vector, we cannot indulge in projects that are out of our budget. This may seem a minor exercise but I can assure you that if we may intervene, we may lose millions of emalangeni. Let the Town Council take care of this one," he said.

300 Chicken Pox Cases Since July

MB0611084590 Mbabane THE TIMES OF SWAZILAND in English 6 Nov 90 p 1

[Report by Vusie Ginindza: "Pox Hits Mbabane"]

[Text] A highly contagious disease, chicken pox, is sweeping the country.

The disease, said to be a milder version of the now almost eradicated but deadlier 'small pox,' may even be an epidemic, health workers warned yesterday.

Since August, in Mbabane alone, an average 100 patients have been treated of the disease, which starts as a very severe rash and develops into large, very painful pimples which emit a liquid fluid.

Chicken pox hits mostly poor neighbourhoods, but once contracted, is very contagious.

The pox, which is listed as a rare disease in Swaziland, with an average of less than 10 cases a year, has raked more than 300 people in only four months.

Records show that the outbreak started showing first signs at about July this year when 15 cases were recorded. In August, the cases shot up to 75. In September, 70 were recorded and October has actually stamped 'Outbreak' to the situation when 166 cases were recorded.

The records were taken from the Mbabane Hospital only.

The disease is mostly rampant in Mahwalala, Sidvwashini, Siphocosini and Msunduza.

Though it naturally attacks groups of all agaes, this time children within the age range from infancy up to 15 years have been hit the hardest since the outbreak started, according to the records at the Mbabane Government Hospital.

Chicken Pox is a viral disease that is highly contagious. Nurses say that it is transmitted through physical contact, sharing the same bath and even staying in the same house with the patient. However, nurses say, the disease is easily cured if medical help is sought in time, and that it scarcely kills.

Chicken Pox Rampage Cause for 'Serious Concern'

MB1511110390 Mbabane THE TIMES OF SWAZILAND in English 15 Nov 90 p 1

[Report by Vusie Ginindza: "Chicken Pox Concern Grows"]

[Text] Chicken pox on the rampage in Mbabane and neighbouring areas is becoming a serious concern.

Nurses at the Mbabane Government Hospital forecast yesterday that cases that may be treated for the rash this month alone, may be more than 200.

That may bring the number of cases at the Mbabane Government Hospital alone, to 500 since August.

Many of the cases have also been treated at the Salvation Army Clinic at Msunduza.

Areas most affected by the rash, are Sidvwashini, Siphocosini, Mahwalala and Msunduza.

However, other hospitals in the country have reported no cases of the pox, which means that only the Mbabane and surrounding areas are affected.

74 Tuberculosis Cases During Jan-Nov

MB1511111090 Mbabane THE TIMES OF SWAZILAND in English 15 Nov 90 p 28

[Report by Vusie Ginindza: "TB Killed 74 People"]

[Text] Five more people have died from the killer disease Tuberculosis [TB].

This brings to 74 the number of death victims of the disease since the beginning of this year.

The latest five all died within the past two weeks.

TB remains the deadliest disease in the country, and by far outstrips the dreaded killer disease, AIDS.

According to statistics from the TB office, at least 95 people were killed by the disease last year.

Officials say what is worrying is that as of May this year, 18 people had died from January, but since then the figures have shot up by an additional 56 victims.

Commenting on the situation, officials said that TB is taken less seriously by the Government even though it kills more than any disease in the country.

Mr. Richmond Ngwenya, the clerical officer, said that among the factors contributing to the poor control of the disease is the transport crisis the department is facing.

"It is really hard, if not impossible, to do an effective control of any disease without transport. Last year we only had three cars, two of which have been since scrapped by the CTA [Central Transport Administration]," he said.

"In the 60's we used to have a car that carried around an X-ray machine. In that case, even people who had contracted the disease that had not then shown any symptoms, were able to get help at the right time. But since that broke down it has never been replaced."

The Principal Secretary in the Ministry of Health, Mr. Chris Mkhonza, said that his attention on the matter of the cars had only been drawn last Tuesday [6 Nov] when TB Control Programme Officers, Dr. Mabuza and Dr. Eddie McGrath, approached him.

"All along the Ministry has been under the impression that CTA had replaced the cars. After a brief investigation we discovered that the cars were re-allocated, but not to TB. So right now, we are on the issue," he said.

Dr. Mabuza also echoed the transport factor as the main factor behind the situation.

TANZANIA

Meningitis 'From Kenya' Kills 104

91WE0047 Kaduna NEW NIGERIAN in English 14 Oct 90 p 6

[Text] Meningitis, which broke out in Tanzania early this year, has so far killed 104 people especially along the Kenya-Tanzania border, a health ministry report said in Dar Es Salaam Friday.

The report said the disease had entered the country from Kenya and was not prevalent in the border areas of Rombo and Mananga, in northern Tanzania's Kilmanjaro and Arusha regions, and in Lake Victoria's Tarime district in northwestern Tanzania.

Tarime district was the hardest hit, with 83 deaths out of 481 reported cases.

In all, 1,332 cases have been reported in Tanzania, and some of the affected areas have been put under quarantine to prevent further outbreak of the airborne disease.

The disease, whose symptoms are severe headaches and fever, can cause death if not treated in time as it attacks the brain and the spinal cord.

TOGO

Movement of Cattle Banned Due To Foot, Mouth Disease

AB0811103090 Lome Domestic Service in French 1900 GMT 6 Nov 90

[Text] The minister of rural development announces: Three areas of cattle foot and mouth disease have been reported at Dzafi in the Yoto Subprefecture, at Togblekope and Baguida in the Gulf Prefecture. Because the foot and mouth disease is a very contagious disease, the entire Maritime Region has been declared an infested zone. Consequently, all movement of cattle, sheep, goats, and pigs within the Maritime Region is strictly forbidden. Similarly, the introduction of livestock into the said zone, the export of cattle, sheep, goats, and pigs from the Maritime Region to other regions of the country is strictly forbidden. In addition, all animals of the above-mentioned species at all the border posts of Togo must be kept in quarantine for a 15-day period before entering the national territory.

UGANDA

Health Ministry Confirms Meningitis Outbreak

EA0111154890 Kampala Domestic Service in English 0400 GMT 1 Nov 90

[Text] The Ministry of Health has confirmed an increase in the number of districts reporting cases of meningitis with some deaths. In a statement issued in Entebbe yesterday, the director of medical services said that the

epidemic has now spread to cover up to one-third of the country. The organism causing the disease has been identified, and drugs for its treatment are available in health units in the country.

The statement said the Ministry of Health is further stepping up efforts for strengthening the supervision of control activities in the most-affected districts. Technical reinforcement has been dispatched this week to districts of Mbale, Tororo, Moto, Mbarara, Bushenyi, Kabarole, Kasese, Rukungiri, Kabale, and Arua, in an effort to stamp out the epidemic as quickly as possible.

ZAIRE

11 Million Said Exposed to Sleeping Sickness

AB0911232090 Paris AFP in English 1653 GMT 9 Nov 90

[Text] Kinshasa—Eleven million people in Zaire are exposed to the threat of sleeping sickness, which is endemic in almost the entire country, medical officials said Friday. Some 30,000 people have been registered as infected with the disease over the past three years.

Seventy-one cases of the malady—scientific name trypanosomiasis—were recently detected in the suburbs north of Kinshasa, and only the mountainous regions of the country are free from the tsetse fly which carries the disease, according to the central trypanosomiasis office here. While only 5,000 cases have been recorded in Zaire since the beginning of 1990, the office indicated that the figures did not reflect the true situation.

The bureau said that detection activities were suspended following the cutoff of 35 million Belgian francs (1.1 million dollars) in aid because of a dispute between Belgium and Zaire over the bloody repression by Zairian security forces of student demonstrations at the University of Lubumbashi in May. Following the crackdown, Brussels demanded that an international commission be appointed to conduct an investigation, a proposal which was refused by Kishasa. Belgium then froze state loans to its former colony, leading Zaire to expel all Belgian volunteer workers from its territory.

ZAMBIA

Cholera Outbreak Occurs in Northern Province

MB1211215090 Lusaka Domestic Service in English 1800 GMT 12 Nov 90

[Text] About 14 suspected cases of cholera, one confirmed, have been reported in Mpulungu, and emergency supplies from the Ministry of Health in Lusaka have already been sent to the area to curb the disease.

Confirming this in Lusaka today, acting Director of Medical Services Dr. Sam Muaiuo said a team from the provincial medical office in Northern Province has been dispatched to the area, but no deaths have been reported.

Dr. Muaiuo said the disease is suspected of having been contracted from neighboring Tanzania and advised people from visiting Mpulungu to avoid its spreading.

Meanwhile, Dr. Muaiuo has cautioned people to adhere to health measures to avoid outbreaks of diseases during the pending rainy season.

ZIMBABWE

State Declares Areas Foot-and-Mouth Disease Regions

MB0611125690 Johannesburg SAPA in English 1222 GMT 6 Nov 90

[Text] Harare —The government has declared provinces and three districts around the country foot and mouth areas, ZIANA national news agency reports.

A notice issued with an extraordinary government gazette here on Tuesday [6 November] listed the areas as the provinces of Mashonaland East, Masvingo, Matabeleland North and South, and ?idlands [as received] and Chegutu, Chipinge and Kadoma Districts.

The declaration is in accordance with Section Five of the Animal Health Act (chapter 121).

Standard Method of Schistosomiasis Diagnosis Found

90WE0258A Beijing KEJI RIBAO [SCIENCE AND TECHNOLOGY DAILY] in Chinese 27 Jun 90 p 1

[Article by Yuan Lixin [5913 4539 2450]: "Unified Standard of Schistosomiasis Diagnosis Method Prescribed in China; as Proposed by Experts, the Standard Should Be Applied in Schistosomiasis Prevention as Soon as Possible"]

[Text] For more than 2 decades, schistosomiasis diagnosis in China consistently centered on serological methods. Since there was no unified standard for selection or preparation and operational procedures for antigens, many test results were not consistent, leading to difficulties in quick diagnosis and treatment of schistosomiasis. But no, through the joint efforts of Tongji Medical University in Wuhan, and Zhejiang Academy of Medical Science, a unified standard was developed for diagnosis of schistosomiasis.

Recently, epidemics of schistosomiasis were relatively severe in some areas of China and schistosomiasis prevention is again becoming difficult. To change the present disadvantageous situation of prevention and treatment, the Parasitology Faculty Research Laboratory at Tongji Medical University, and the Parasitology Research Institute of Zhejiang Academy of Medical Sciences jointly accepted the state-assigned key research project during the Seventh 5-Year Plan in September 1986. In 4 years, the researchers concentrated on extensive and systematic studies on antigen standardization and standards for the indirect red blood cell agglutination test and enzyme-linked immunosorbent assay (ELISA). From five varieties of antigens researchers screened a standard antigen for indirect red blood cell agglutination test, and from seven varieties, they screened one for the enzyme-linked immunosorbent assay. It is demonstrated that the method of preparing these two standard antigens is simple, with a high antigen recovery rate at low cost. The method has low cross reactions with other parasitic diseases, thus enhancing the diagnostic efficacy for schistosomiasis.

As far as the standardizations are concerned, the treatment of blood cells with diaminophenol for the indirect blood agglutination test did avoid blood cells self-coagulation and ensure the stability of blood cell products. The researchers also made extensive quality control studies of enzyme-linked immunosorbent assay by constructing a quality control chart in order to ensure the test results stability and comparability. Subsequently, the reagent kits were successfully developed for the indirect blood agglutination test and enzyme-linked immunosorbent assay. As shown by monitoring, testing and verification with more than 2,000 people, all results are consistent with the results of this study. These reagent kits are highly sensitive and specific, cheap, and convenient in storage and application, thus being convenient for promotion among basic-level schistosomiasis prevention teams.

State Councillor Speaks at Schistosomiasis Meeting

HK1911032990 Wuhan Hubei Provincial Service in Mandarin 1000 GMT 16 Nov 90

[Excerpt] The national meeting on prevention and cure of schistosomiasis called by the State Council ended in Wuhan this afternoon.

Li Tieying, member of the CPC Central Committee Standing Committee and state councillor, gave a speech at the meeting this morning. He stressed that we should really become enthusiastic, make up our minds, and make vigorous efforts to eliminate schistosomiasis to ensure that people in the afflicted areas have good health. After the Nanchang conference held last year, the afflicted provinces, together with departments and commissions concerned under the State Council, took immediate action against schistomiasis, opening up a good phase which had not been seen over the preceding few years. However, since checking and eliminating schistosomiasis is a long-term, arduous task, we still face a lot of difficulties and problems, and the present epidemic situation remains acute.

He put forward his opinions on the tasks, goals, and measures for prevention and cure of schistosomiasis in the coming years. When talking about the plan for prevention and cure of schistosomiasis during the Eighth Five-Year Plan, he said: We must draw up a sound plan in preventing and curing schistosomiasis, just as we have done in taking up other tasks. The long-term principle tasks to be accomplished in five years, and major measures to be taken have to be written into the plan. The State Planning Commission and Public Health Ministry have drafted a plan for prevention and cure of schistosomiasis for the Eighth Five-Year Plan. As soon as it is approved, we must implement the plan to the letter. Planning commissions in all localities should, under the guidance of governments, incorporate the work to eliminate schistosomiasis into the state or local plans to bring rivers and lakes under control, build conservancy projects, and prevent and cure sicknesses. Money invested in the project is the material foundation for eliminating schistosomiasis. Under the existing financial system, the related expenditures will be jointly born by the state, the collective, and the individual. The central government will provide funds for the purpose every year and will increase the amount year by year. Local governments should increase their input into the work in accordance with their financial strength and the epidemic situation. The related input in the next five years should not be lower than the highest figure in the past. We should galvanize the masses and all departments concerned and social sectors to volunteer for and support the work. We should also take measures to guarantee the quality and quantity of the medicines needed

for this purpose, and make sure that the prices of the medicines remain stable and that they will be delivered in time.

As for the leadership system, Li Tieying pointed out: At present, we should continue to apply the method of local governments and central departments concerned closely cooperating with each other and making joint efforts under the leadership of the State Council. Public health, agriculture, and water resources departments should set up special groups to take care of the work. The State Council has approved the plan to set up special organs for the work in five provinces around the Dongting Hu. Other afflicted provinces and autonomous regions should set up and strengthen anti- schistosomiasis leadership line-ups at various levels in accordance with their actual conditions. Comprehensive anti-schistosomiasis work systems should be set up in counties where schistosomiasis prevails.

Li Tieying continued: Anti-schistosomiasis propaganda and education are of great importance. We should tell the people of the great damage likely to be caused by schistosomiasis, how to prevent and cure the disease, and to give up bad habits in daily life and production. We should carry out the related education among children as well as among adults so that everybody will become an anti-schistosomiasis fighter.

Li Teiying also called for strengthened scientific research in this respect.

Li Tieying concluded his speech by saying: Next year is the first year for carrying out the Eighth Five-Year Plan. The key tasks for the anti-schistosomiasis campaign are putting the related program into effect and summarizing and spreading the successful experience in preventing and curing schistosomiasis in a scientific way. From next year onward, the State Council will commend a number of advanced counties, collectives, and individuals who have made outstanding achievements in the anti-schistosomiasis campaign. [passage omitted]

Technique for Identifying Kala-Azar Pathogens Developed

90WE0258B Beijing KEJI RIBAO [SCIENCE AND TECHNOLOGY DAILY] in Chinese 14 Jun 90 p 2

[Article by Gao Zhu [7559 2691]: "Identification of Kala-Azar Pathogens Awarded Achievement Prize"]

[Text] As instructed by supervisory professor Hu Xiaosu [5170 1321 4790] and assisted by colleagues, doctoral candidate Lu Honggang at the College of Fundamental Medicine, Huaxi Medical University, successfully applied a new technique for the first time in China in identifying different types of kala-azar pathogens. In May, this achievement was awarded a second-class prize for science and technology in 1989 by Sichuan Provincial Government.

Kala-azar is one of the five major parasitic diseases in China. As early as 1959, China had announced the basic eradication of kala-azar. In recent years, however, the epidemic status of the disease again worsened to the severe stage. One thousand and sixty-nine cases were recently discovered; these cases are mainly distributed in hilly epidemic areas of southern Gansu and northern Sichuan, as well as the Xinjiang desert.

Based on the principle of molecular genetics and a new technique of molecular hybridization, Lu Honggang and coworkers have classified and identified several types of kala-azar pathogens in China. Differences of these Kala-azar pathogens were disclosed for the first time in China. The established K-DNA hybridization method can differentiate different types of kala-azar pathogens relatively quickly and accurately, thus it is valuable for rapid identification of the disease, the vectors, the types of Leishmania donovani Protozoa of hosts, and in developing preventive and treatment measures.

New Drug Developed To Treat Hepatitis B

OW1311105590 Beijing XINHUA in English 0737 GMT 13 Nov 90

[Text] Hefei—An effective drug for the treatment of hepatitis B has been successfully developed at the Anhui Clinical Pathology Institute in Hefei City, capital of east China's Anhui Province.

The new drug is made from a substance refined from a traditional Chinese herb and it strengthens the body's immune system to resist diseases.

The drug has no harmful side effects. After taking the drug patients have all reported improvement.

Professor Xu Shuyun and his colleagues began research on the drug in 1986.

Medical Geography of China Analyzed

90WE0346A Beijing DILI XUEBAO [ACTA GEOGRAPHICA SINICA] in Chinese Vol 45 No 2, Jun 90 pp 187-201; (MS received Feb 90)

[Article by Tan Jianan, Li Ribang, Zhu Wenyu, Institute of Geography, Chinese Academy of Sciences, Beijing]

[Excerpt] [Abstract] This paper first briefly relates the historical development of medical geography in China. During the period since the 1960's, medical geography has undergone the greatest development. Especially in the aspects of endemic diseases and cancers, significant progress has been made in studying geographical distribution laws, geographical epidemic features, ecological characteristics, environmental pathogeny, environmental improvement and medical mapping. Based on the development of the discipline at home and abroad, this paper briefly relates the nature and task of medical geography. According to the major research fields of medical geography (geography of diseases, geography of health, geography of health care, mapping of medical

geography), the main achievements obtained in China in each respective field are briefly expounded here. Some of the research results have attracted widespread attention and concern at home and abroad.

I. Historical Development and Present Conditions

In China, a preliminary idea of medical geography developed very early. As early as some 2,000 years ago, "Nei Jing" explicitly expresses the idea that the human race and the natural environment are a united entity. It was believed that the survival of the human race, its health and diseases are related to the geographical environment. "Lu's Spring and Autumn Annals" (circa 239 B.C.) also explicitly records the relationship of endemic diseases and the environment.[1] Similar ideas and related records appeared very often in historical, medical and geographical publications thereafter.

Medical Geography, as an independent discipline, first appeared abroad towards the end of the 18th and the beginning of the 19th Century. In China, this development was much later. Until the establishment of the New China, there was no specialized research or publications on medical geography. After the establishment of the New China, and particularly since the late 1960's, research on medical geography went through rapid development. First, in the field of research on geographical distribution patterns and environmental factors of endemic diseases (iodine-deficiency diseases, Ke-shan disease, big joints, plague, etc.), there has been direct participation by geography scholars. Soon after, similar research appeared on regionally and frequently occurring cancers (such as cancer of the eosophagus, cancer of the liver, cancer of the nasopharynx). Thereafter, research on medical geography developed into areas of other diseases and health problems, such as regional infertility, pollution-caused health hazards, nutrition, longevity and quality and quantity of population. Correspondingly, research papers and publications of related medical geography mushroomed in magazines and medical journals, environmental science and geo-studies, indicating the great prosperity in the development of medical geography in our nation.

The co-operation and mutual exchanges between medicine and geo-studies in the study of specific problems (such as causes of diseases and prevention) are a salient feature in the development of our nation's medicla geography. A concrete example of this is the integrated scientific study of regional diseases and cancer. This is also one of the important reasons why our nation's medical geography has developed so rapidly ever since the 1960's. The compilation and publication of "A Pictorial Account of Malignant Tumours in the People's Republic of China"[2] and "A Pictorial Account of Regional Diseases and the Environment in the People's Republic of China"[3] testify to the important progress our nation has made in integrated medical geography. It is also the fruit of achievement of co-operation between medicine and geostudies. The discovery of low-selenium regions in China and the close relation between low selenium and Ke-shan disease and big joints not only provides the basis in the breakthrough of the long-unknown causes of the two diseases, which have attracted attention abroad and at home, but also mark very salient progress in the study of the effect of China's disease ecological geography on chemical factors. Medical Geography features are also very outstanding in research on regional diseases related to environmental and biological factors. Moreover, in various individual universities, medical geography was established as a field of study in the university curriculum and various publications on medical geography are compiled or published. In the latest edition of the Encyclopaedia Sinica, Medical Geography is listed for the first time as a separate independent item and the nature, object and tasks of modern medical geography are systematically expounded.

Medical Geography is the study of the geographical distribution pattern of human diseases and health conditions; the relationship between the occurrence and spread of diseases, health condition changes on one hand and the geographical environment on the other; and also in the science of how to allocate and reasonably locate medical and health care facilities. It includes the geography of diseases, the geography of nutrition, health geography, health-care geography, rehabilitation geography, environmental pollution and health, and medical geography mapping, all of which are different and yet are closely related branches of study in the realm of medical geography. What follows is a brief summary of the research results and progress made in various main branches.

II. Geography of Disease

The following is a brief summary of the effect of various environmental factors on various diseases.

A. Geography of diseases related to the environment's biological factors

Diseases caused by biological factors are the most widely studied and also the oldest field of geography of diseases. These diseases include regional diseases, acute infectious diseases, and chronic infectious diseases—a total of some 20 different diseases. Our nation is extensive in area, with a complex and a large variety of ecological environments, thus providing the physical conditions for the reproduction and the breeding of a wide variety of disease-related microorganisms. This also explains the importance and urgency of starting and developing the field of research into biological diseases within the study of medical geography in our nation. It can be said that the study of the geography of various diseases in China is not balanced, with more research being done on regional diseases which are closely related to the geographical environment: diseases such as plague, schistosomiasis, and malaria.

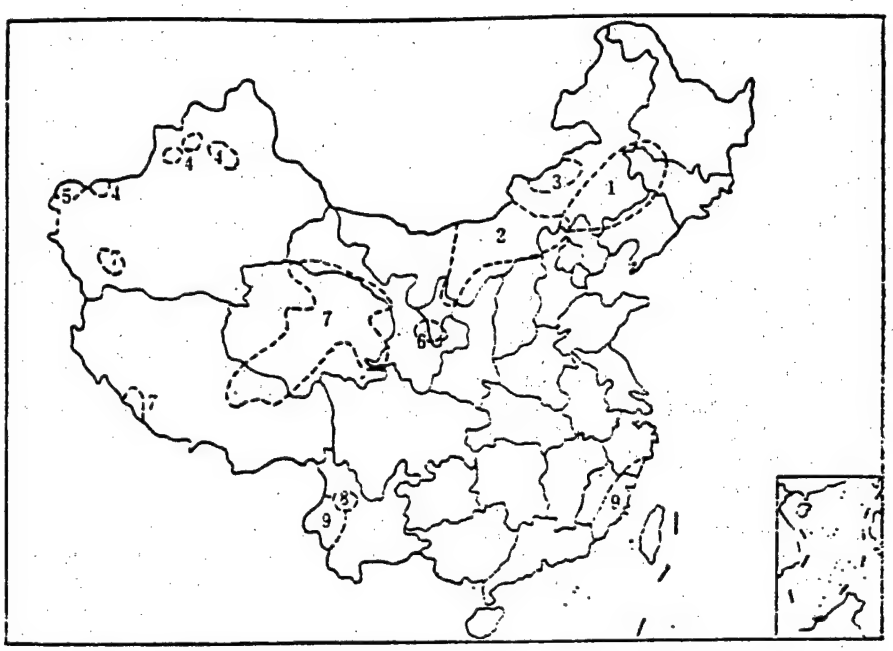


Fig. 1 The Distribution of Natural Focuses of the Plague in China

Key:—1. Natural focus of plague-Tongliao Plain, Da Wu Er Ground Squirrel—2. Inner Mongolia Plateau Long Claw Sand Rodents—3. Xilin Gol Plateau Voles—4. Tian Shan Hilly Region Grey Marmot—5. Pamir Plateau Long-tail Marmot—6. Gansu-Ningxia Loess Plateau A La Xin Ground Squirrel—7. Qinghai-Tibetan Plateau Himalayan Marmot—8. Northwest Yunnan Hilly Region Big Velvet Squirrel—9. Household Mice (Data from refs. 4,5)

1. The Geography of Plague

Plague is a very old disease, existing and spreading among rodents well before the existence of men on earth. It is one of the natural epidemic diseases. There were three large outbreaks of plague in history with total deaths of over 100 million. In our nation alone, in the 50-year period from 1900 to 1949, some 1,155,884 people were inflicted by the disease and 1,028,808 people died of the disease, with a death rate of 89 percent.[4] After the establishment of the People's Republic, various preventive and healing organizations were established from the Central Government down to Local Government. By 1955, plague among human beings was brought under control in our nation. At present, the control is achieved to such a level that only a few occasional cases of the diseases are found and these cases were confined to remote areas such as Qinghai-Tibetan Plateau and Gansu Province.

After several large-scale investigations of the originating areas for the plague disease, a total of 43.7 x 10,000 square km of area was found.[4] The geographical distribution features of the disease were discovered (Fig. 1). The different types of plague germs and the relationship between the host and the environment were found. After investigating the natural source of the disease and on the basis of the biochemical properties, modes of nutrition, content of internal toxins in the plague, a total of 17 different ecological types of plague germs can be discovered. Each ecological type of plague germs has its own specific geographical location, and the harmful effects and disease-causing properties are also different. Of these, the strongest type is the Qinghai-Tibet Plateau type and the Gangdise Shan type which live in Himalayan marmots as the hosts. These types have the strongest harmful effect and the strongest disease-causing attack. The weakest type is the Xilin Gol Plateau type, which lives in voles.

These research studies deeply reflect that the existence of the natural sources of the disease and the special ecological modes of plague germs are obviously related to geographical conditions. That is, in most of the cases, they are related to forest grasslands, grasslands, desert grasslands, plateau grasslands, and grassy marshland. Moreover, different hosts and different modes of spreading exist for different landscapes and the characteristics and disease-causing properties are also different. Therefore, one of the tasks of the study of the geography of plague diseases is to find a way of removing the source of diseases for such corresponding type of geographical area of the disease.

2. The Geography of Schistosomiasis

There is a long history of schistosomiasis epidemics in our nation. An examination of the female corpse unearthed by archeologists in the 1970's from the

Western Han Dynasty Tomb in Ma Wang Xui, a city in Changsha, Hunan Province, and the examination of the male corpse unearthed from the Western Han Dynasty Tomb in Phoenix Hill, Jianling County, Hubei Province, have both revealed the presence of schistosomiasis eggs. Therefore, it can be said that as early as 2,100 years ago, schistosomiasis has been known to exist and to spread in the areas around the middle and lower course of the Yangtze River.[6]

Schistosomiasis is very widespread in our nation and its harmful effects are serious. In the 40 years prior to the Liberation, 1,362 villages were destroyed and wiped out as a result of outbreaks of schistosomiasis and some 310,000 people died of the disease.[6]

With the establishment of New China, the areas of flagrant schistosomiasis disease and the geographical distribution of oncomelania were mapped out in various stages. It was found that a total of 12 provinces (autonomous regions and municipalities) and 348 counties are areas of flagrant schistosomiasis and some 100 million people come under the threat of the disease. At the end of 1983, the oncomelania area was found to be 140 x 100,000,000 square meters and some 11,370,000 people were victims of the disease.

The geographical distribution and the area of flagrant attack of schistosomiasis are closely related to the geographical environment. The geographical distribution of the disease corresponds exactly to the distribution of oncomelania. Oncomelania is very sensitive to temperature and the most optimal temperature for it is about 13 degrees Celsius. Therefore, oncomelania is mainly found in the milder South, its distribution mainly corresponds to the part south of the annual average isotherm of 14 degrees Celsius.[6] That means the two banks of the Yangtze River and the provinces south of it. Dongting Lake, Boyang Lake, the Han Jiang Plain, and the Yangtze Delta areas are all areas of serious schistosomiasis disease. According to the geographical features for the breeding of oncomelania, the natural geographical landscape for the schistosomiasis disease areas can be divided into three types: plain-river network type, hilly area trenches and ditches type, lake area-swampy area type. The patients in the first type, the plain area-river network type, are most numerous because the population density is highest and the chances of making contact with the diseased water is much higher.

After several tens of years of hard work and effort, an important achievement has been made in the prevention and cure of schistosomiasis disease. A total area of 110 x 100,000,000 square meters has been rid of oncomelania, which is 78.6 percent of the total area of oncomelania breeding. Some 10,000,000 people have been cured of the disease, i.e., 80 percent of the total patient population. However, at the present time, there are still some 550,000 people infected with the disease and some 32 x 10,000 square meters are still populated by oncomelania. In recent years, there has been a rise in the number of schistosomiasis cases. Therefore, the prevention and cure of schistosomiasis disease is still the subject of long-term study in Medical Geography.

3. The Geography of Brucellosis

Brucellosis disease, a kind of infectious-anomalous disease common to both man and animals is caused by brucellosis bacteria. In China, cases of the disease were first discovered in the early 19th Century when the French colonists first introduced dairy sheep which caused an outbreak of the disease to both sheep and men in some 80 villages in the suburbs near Qingdao. Prior to the Liberation, there were reports of outbreaks of the disease to both men and animals in Chongqing, Henan, Jiangsu, Harbin, Gansu, Beijing, Inner Mongolia, Jilin, Hebei, Tibet and Shanghai. At the time, the areas affected by the disease are extensive and in some affected areas, the problem is fairly serious.

Since 1981, a large-scale investigation of Brucellosis disease has been conducted and some 30,000,000 head of livestock—namely, sheep, cattle, and hogs—21 provinces (autonomous regions and municipalities) have been examined. Thus, an understanding of the disease in livestock and men all over the country over the years has been obtained. Moreover, it was found that the Brucellosis bacteria in our nation is basically the sheep type, and most of the outbreaks occur in the ranching areas in the North and also in some agricultural areas; the cattle-type Brucellosis disease occurs mainly in the dairy-cattle ranching areas in the North and also in Sichuan Province; the hog-type Brucellosis disease occurs mainly in Guangdong and Guangxi Provinces.

4. The Geography of Malaria

Malaria has probably had a history of over 3,000 years in our nation. In pre-Liberation days, malaria epidemics were very serious and it is estimated that some 30,000,000 people were infected with the disease every year, with a death rate of 1 percent. The areas of malaria epidemics in our nation can be summarized and categorized into four different types: 1) high-outbreak areas: areas south of 25 degrees North Latitude; 2) medium-outbreak area: the area in between 25 degrees North and 33 degrees North Latitudes; 3) low-outbreak area: areas north of 33 degrees North Latitude; 4) no-outbreak area: dry and drought areas in the north and also the Qinghai-Tibet Plateau areas. Moreover, a total of 14 different types of anopheles in our nation have been determined to be capable of spreading the malaria disease. Of the total of 14, the Zhonghua anopheles, the Anopheles Lesteri, Anopheles minimus, and anopheles balabacensis are the main media for spreading the disease. Because the anopheles like warm and humid environmental conditions, areas of serious malaria epidemics are found in the tropical and sub-tropical regions, most serious of which are the southern part of Yunnan Province, Guizhou Province, Guangxi Province, Guangdong Province and also Hainan Island.

The prevention of malaria in our nation has achieved significant progress and cases of the diseases have reduced in number greatly. Compared to 1954, the number of malaria cases in 1983 has dropped by as much as 88.6 percent.

5. Others

Besides the foregoing, various levels of research were made into the medical geography of diseases caused by biological factors, such as filariasis, caused by parasitic worms; kala-azar; acute infectious diseases caused by viruses such as smallpox, polio, measles, encephalitis Type B, epidemic haemorrhage; disease caused by bacteria such as cholera, diphtheria, epidemic meningitis; diseases caused by spirochaeta such as relapsing fever, hook-shaped spirochaeta disease; chronic infectious diseases such as tuberculosis, venereal disease, leprosy, etc. A better understanding of the geographical distribution, geographical epidemic features and the relationship to geographical environment for these diseases has been obtained. Conversely speaking, the understanding of these patterns has a positive and beneficial effect in the extermination and control of these diseases. [Passage omitted]

Famine in Drought-Hit Sichuan

HK1011014790 Hong Kong SOUTH CHINA MORNING POST in English 10 Nov 90 p 8

[Article by John Kohut in Beijing]

[Text] Eastern Sichuan province has been so hard hit by drought that the authorities have been forced to dispatch thousands of vehicles each day to provide drinkable water for residents, many of whom are seriously ill from polluted water.

Hundreds of thousands do not have enough food.

Director of the General Office of China's Water Resources Ministry, Mr Li Changfan, said about nine million people, nearly one-tenth of the province's population, and seven million livestock were without adequate supplies of drinking water in an area covering 33 of the province's 200 counties, or about one million hectares of land.

Some people had developed dysentery and ophthalmia (inflammation of the eye) from drinking dirty water, he said.

Mr Li was not able to say how many had become ill, but said the province had sent teams of doctors to the area with medicine provided by the Health Ministry.

A number of elderly and sick people were being moved out of the region to areas with more water.

Some areas now depended on daily convoys of trucks for drinking water, he said.

As a result of the drought, which has lasted more than three months in some areas of the province, some 300,000 people do not have enough grain to eat, said Mr Li, interviewed at the ministry in Beijing.

About a third of the crops in the drought-stricken area were a total loss, he said.

Although, like the rest of the country, grain production in Sichuan has hit a record this year, poor roads made it difficult to send in supplies of grain to the more mountainous areas of eastern Sichuan, he said.

"The area depends on agriculture. Without agriculture, the area needs outside support," said Mr Li, who is from eastern Sichuan.

Rainfall for the second half of this year has been from 60 to 90 percent below normal in eastern Sichuan. Reservoirs are at only a third of their normal levels, he said.

Unless there was rain soon, this year's drought could have an impact on next spring's crops, some of which are now being planted, Mr Li said.

Sichuan Governor Mr Zhang Haoruo and Water Resources Minister Mr Yang Zhenhuai had recently gone to inspect the area, which is being given special financial assistance by the central Government, although Mr Li was not able to specify the amount of funding.

While many go hungry in eastern Sichuan, ironically, the record output elsewhere in the province has been so great that prices on the free market have dropped sharply.

The PEOPLE'S DAILY said recently that because of falling prices, peasant incomes in Sichuan had dropped 10 yuan (HK$16.50) per head in the first half of this year compared with the same period of 1989.

In total, about four million hectares of land throughout China have been hurt by drought this year. Other provinces include Henan, Hebei, Shandong and Shanxi. None, however, had suffered as badly as eastern Sichuan, Mr Li said.

A CHINA NEWS SERVICE report said about 100 experts on water resources were holding a meeting in Nanjing to discuss ways to solve the worsening problem of water shortage.

The meeting was told about 200 Chinese cities were facing a water shortage. Of these, 40 were classified as serious.

Research Shows Circulatory System Has Endocrine Function

OW1611075790 Beijing XINHUA in English 0720 GMT 16 Nov 90

[Text] The circulatory system of a human body is not only a hemodynamic system, but also possesses an endocrine function.

Prof. Tang Jian of the Beijing Medical Sciences University who headed the research team said the findings have been appraised by the Ministry of Public Health.

The research was carried out by experts from the Research Office of Cardiopulmonary Endocrines of the Beijing Medical Sciences University and the Angiocardiopathy Institute of the Chinese Academy of Medical Sciences.

Specialists taking part in the appraisal conclude that the project is up to the advanced international standards and the findings are of importance to the control and diagnosis of high blood pressure and cardiovascular diseases.

Funds Allocated for Snail Fever Eradication

HK1511032090 Beijing CHINA DAILY in English 15 Nov 90 p 3

[By staff reporter Xiao Zhu]

[Text] Wuhan—An estimated 602.5 million yuan ($128 million) is expected to be put into the nationwide campaign to wipe out snail fever during the five years between 1991 and 1995, CHINA DAILY has learned.

The figure was given by the ongoing National Working Conference on Snail Fever Control in Wuhan, which is discussing a draft five- year programme for the work.

The draft programme requires about 33 percent of the funding to come from six State departments—the State Planning Commission and the ministries of water resources, agriculture, forestry, public health and finance.

The remainder is to be provided by local governments at all levels and the public in the eight epidemic provinces of Jiangsu, Hunan, Hubei, Jiangxi, Anhui, Sichuan, Yunnan and Zhejiang.

The programme has set a target to eliminate, or virtually eliminate the disease in 74.1 percent of the counties classified as epidemic regions.

Some 90 percent of residents above seven years old living in snail-infested areas must be taught the basic methods of snail fever control both to arouse their enthusiasm to join the campaign and prevent themselves from being harmed by the disease, according to the programme.

The number of patients and affected animals should be reduced by at least 40 percent during the five years, and the amount of snail- infested land be cut by 30 to 50 percent.

A recent survey showed that snail fever still prevailed in 118 counties, mainly in the lake and mountainous areas of southern China.

The country now has about 1.5 million people suffering from the disease, of which 55,000 are in an advanced stage. Some 3.55 billion square metres of land had been discovered with snails, according to the survey.

The rates of infection are 14.4 percent in Hunan Province, and 16.8 and 12.9 percent in Yunnan and Hubei provinces respectively.

Some 17.5 percent of animals are infected in Hunan and 44.8 percent in Sichuan Province.

The survey showed that in some villages, the rate of infection among people was as high as 80 percent, severely harming the health of residents and holding back the local economy.

Jiangxi Province has 210,000 patients around Boyang Lake, leading to annual economic losses of 27 million yuan ($5.7 million).

HONG KONG

Shadow of 1997 Cast Over Battle of TB

91WE0055 Hong Kong SOUTH CHINA MORNING POST in English 19 Aug 90 p 5

[Article by Kathy Griffin]

[Text] Hongkong is unlikely to be rid of tuberculosis by 1997—and the impending hand-over may be one of the reasons, according to the consultant in charge of the territory's tuberculosis and chest service.

Dr Chan Shiu-lun said increased contacts with the mainland over the next decade would aggravate efforts to eradicate the disease, which was up to 20 times more prevalent in the territory than in other developed countries.

Migrants from China were responsible last year for 387 cases of the highly-infectious disease, which spread quickly in the territory's crowded conditions.

Vietnamese boat people were also carriers, accounting for 226 cases last year, although it was unlikely they infected the general population because they had little contact with local people.

Dr Chan said the overall rate had slowly declined, from 12,425 or 404 per 100,000 people in 1960, to 6,704 or 116 per 100,000 last year.

But this was still well above the rates of 6.3 per 100,000 in Britain and five in Canada and Australia, and it rose every time there was an influx from the mainland, he said.

The 1950s, the Cultural Revolution and the end of the 1970s, when a growing influx led to the ending of the touch-base policy in 1980, all brought on increases in the disease.

"It's taking a long, long time to get the rate down because of the influx and overcrowding," Dr Chan said.

"At the moment there is free movement between Hongkong and neighbouring countries. When the political situation changes, the movement will be freer and more frequent. That is anticipated, and that is why the tuberculosis situation will be maintained for some time."

Dr Chan also responded to statements made last month by Dr Peter Davies of Britain, who said all Hongkong immigrants under the nationality package should be screened.

Dr Chan said the rate of tuberculois often increased among new immigrants during their first five years in a new country—but not in the indigenous population.

He also said the information used by Dr Davies—based mainly on emigration in the 1960s—probably would not apply today because the incidence in Hongkong was lower and those emigrating were likely to come from economic or class backgrounds which enabled them to live in less crowded areas.

Dr Chan says 95 percent of Hongkong people aged 15 and older are infected with the air-borne tuberculosis bacteria but most do not develop the disease.

Strangely, it becomes full-blown mainly in men and women in their 20s, and in older men.

"There is no scientific evidence to explain this, but I assume it may be because [young people] are finishing school and starting work, then marrying and running a family. There are all kinds of stress and strains, and a change in environment," Dr Chan said.

He said these factors might make them weaker and less able to kill off the infection, so they developed tuberculosis.

The disease can appear from six weeks to 20 years after infection. Twenty percent of victims do not show any symptoms but they can still pass on the bacteria.

The usual treatment is chemotherapy, introduced in the territory in 1951. It is milder than the kind used for cancer cases.

The other control on the disease is the controversial vaccine, BCG, which is administered to newborns.

A report on tuberculosis by two British consultants, completed in March, said Hongkong's efforts to fight the disease were satisfactory. But it has recommended a research centre be set up to keep tabs on developments, and the Medical Development Advisory Committee will consider this next month.

BULGARIA

Reportage of 'Hepatitis Epidemic'

In Ruse

AU0611134390 Sofia ZEMEDELSKO ZNAME in Bulgarian 1 Nov 90 p 2

[Text] Ruse, 31 October—There is a hepatitis epidemic in Ruse. At the moment there are 392 cases in the city, while 565 persons have fallen ill in the region of the former Ruse Okrug. Of these, 176 fell ill during October alone, which is a "record" in the statistics kept by the Hygiene and Epidemiological Institute and the infectious diseases department of the hospital. By way of reassurance, it may be stated that the epidemic is developing at average intensity and is expected to reach its peak at the end of 1990 or beginning of 1991. In Ruse the disease mainly affects children and causes relatively light effects.

Cases Decline

AU0211085390 Sofia BTA in English 0818 GMT 2 Nov 90

[Text] The Ministry of Health has worked out a special program for healthcare in the condition of the autumn and winter crisis. A reserve of medicines and of medical consumable supplies will be set up to use in critical situations. In the restructuring of the health service, the inefficient or non- essential health care establishments will be closed down.

The Council of Ministers decree whereby private trips and the import of foods and beverages from Romania were restricted in order to prevent the spread of cholera from that country has been repealed.

There is a suggestion that the Government Commission for the Prevention of Epidemics, Infectious Diseases and Food Poisoning should retain its functions as a permanently operating body with the Council of Ministers.

The incidence of infectious hepatitis in Bulgaria is declining. The number of cases remains large only in the areas of Varna, Veliko Turnovo and Khaskovo.

A commission of experts of the Midipharma State Company has distributed the free aid from Greece among the health care establishments depending on their needs.

The secretary general of the SOS Kinderdorf International Organization will start implementing a six-month emergency aid project for one thousand most needy children in Bulgaria. Foods and staple medical consumables will be made available to orphanages and abandoned children's institutions.

In Dobrich

AU1511175090 Sofia DUMA in Bulgarian 14 Nov 90 p 2

[Text] A hepatitis epidemic has broken out in the region of Dobrich. In a single day 200 people were admitted to hospitals with a diagnosis of hepatitis. Most of the patients are children and people under 40 years of age. The disease is most prevalent in the municipalities of Balchik, General Toshevo, and Tervel.

The hospital administration is taking the necessary measures.

In Varna Region

AU1611214490 Sofia Domestic Service in Bulgarian 2100 GMT 16 Nov 90

[Text] The spread of viral hepatitis-A in the Varna region reached its epidemic peak. From 4 to 14 November 344 people suffering from this illness have been admitted to the hospitals. During the same period on 1989 there were only 36 such cases.

Since the beginning of the year there have been 1,521 cases of hepatitis, while during the same period in 1989 there were only 270 cases.

The illness attacks peoples of both sexes, but it is spread mostly among the children. Some 39 percent of the ill are between ages 8 and 17. Of a total of 62 schools in the region only three have not been affected by the epidemic.

The conditions that facilitate the spread of hepatitis practically do not exist in the civilized countries.

It is expected that the epidemic will encompass all age groups. Therefore anti-epidemic measures have been adopted. They include the isolation of the sick, recommendations on maintaining exceptional personal and social hygiene, and so forth.

Gastrointestinal Infections in Burgas, Vidin

90WE0325A Sofia MLADEZH in Bulgarian 15 Aug 90 p 2

[Article by Daniela Feralieva, Galina Paskaleva, and Ivan Chervenkov: "Worry Is (Not) Unnecessary: There Is No Cholera, but the Sanitation Isn't All That Great, Either"]

[Text] At the end of last week, Minister Chernozemski stated in MNZSG [Ministry of Public Health and Social Care] that, from the elementary sanitation point of view, the condition of the Durankulak checkpoint is tragic. It was also understood that the condition of the Silistra checkpoint is far from any civilized idea of cleanliness. The briefing ended with the fact that sanctions have been imposed on both places that, unfortunately, did not sound at all reassuring. Yesterday, another name was placed on the list of those receiving sanctions (all for poor sanitation), that of the Kalotino KPP [Checkpoint]

deputy chief, and, according to unconfirmed information, the same fate will befall some of the people in charge in Bregovo. It is almost certain that systematic inspections will hardly reveal even one border checkpoint in our country that would "shine" (literally and otherwise) with its cleanliness.

Of course, those responsible for the "enviable" sanitation conditions of the checkpoints will suffer the consequences of their negligence. Thank God, it is still in the form of fines. The happy news that so far there is no diagnosed case of cholera in our country does not at all mean that we should rely solely on the established 28 regional depots to safeguard the population from epidemics of infectious diseases and food poisoning. It does not mean that the danger has passed, either. And, what is more, if we manage to get away only with fear from cholera epidemics (pray to God that is all there is!), we will be able to protect ourselves from other serious gastrointestinal infections. Because in...

Burgas: Children's Summer Camps Are Being Closed

The statistics for the Burgas region up until 8 August are definite: 649 cases of gastrointestinal diseases, of which there are 588 cases of enterocolitis and 90 cases of dysentery. There are no cases of typhoid fever, paratyphoid fever, and cholera, but this does not mean that there is no cause for concern. Quite the opposite: The presence of thousands of tourists, a great number of which pass in transit from Romania to Turkey and back, as well as the catastrophic water shortage, not only in Burgas but also all along the Black Sea shore, have significantly increased the risk factors for spreading infections imported from abroad. Dr. Svetla Stancheva, deputy director of HEI [Hygiene-Epidemiological Institute], Burgas, insists that the inspections strictly fulfill their obligations, and, in spite of objective difficulties, there are no compromises with respect to sanitation and hygiene requirements. Inspections, however, are incapable of washing everyone's hands and do not guarantee product purity. Tens of children's summer camps and vacation establishments in the Pravda and Obzor region will be closed because it is impossible to secure at least 40 liters per person of water for washing, as well as the necessary quantities of drinking mineral water.

Vidin: 38 Cases in 10 Days

During the first 10 days of August, there have been 38 cases of infections accompanied by diarrhea syndrome, of which there are 14 cases of dysentery, 15 cases of salmonellosis, and nine cases of enterocolitis. The increase, as compared with the same period of last year, is not great. However, the location of the region near the border, where a large number of tourists pass through three border checkpoints, is cause for alarm. It is necessary for HEI to constantly monitor 3,000 sites on the territory of the former Vidin okrug such as food stores, restaurants, coffee shops, cafeterias, and kindergartens. Tsvetan Vankov, HEI director, gives assurance that the condition of the drinking water is checked daily.

For July and August, the facts for the country are as follows: three salmonellosis outbursts, two staphylococcus infections, and two cases of dysentery. In spite of this, Dr. Stanislava Popova, chief expert at MNZSG and deputy chief state sanitation inspector, insists that there is no need to panic. The Government Commission for Organization and Protection of the Population from Epidemics of Infectious Diseases and Food Poisoning is working. Border checkpoints and the main road arteries of the tourist movement, the Black Sea shore, and markets are being monitored. There is no shortage of disinfectants. The rest is a question of conscientiousness. Because conditions for a cholera epidemic are absent, an outburst can be caused only by a contaminated water source.

It is hoped that the difficult water shortage and overcrowding of people in substandard places, illegal trade with food products, and the lack of cleanliness in populated areas will not play a mean trick on us. The surest deterrent is still personal hygiene.

BOLIVIA

Health Ministry Confirms Measles Outbreak

PY0211021090 La Paz EL DIARIO in Spanish 23 Oct 90 p 3

[Summary] The Health Ministry has confirmed that 102 cases of measles have been registered so far in several regions of the country and that 25 cases of streptococcal laryngitis have been detected in the Challapata region, Oruro Department. National Epidemiology Director Roberto Vargas has reported that the situation is under control.

BRAZIL

Meningitis Outbreak in Sao Joao da Boa Vista

PY1011023490 Sao Paulo O ESTADO DE SAO PAULO in Portuguese 6 Nov 90 p 13

[Summary] Over the past five months, 17 cases of meningococcal meningitis have been reported in Sao Joao da Boa Vista, 229 km from Sao Paulo; three people have died of this disease. In October alone, five cases were reported in this district.

Health Minister on Immediate Goals, Achievements

91WE0024A Brasilia CORREIO BRAZILIENSE in Portuguese 23 Sep 90 p 16

[Interview with Health Minister Alcene Guerra, by Alexandre Torres, date and place not given]

[Text] In the next four and one half years, the government will invest more than $100 billion—the equivalent of its foreign debt—to attempt to restore the health of the Brazilian, who is plagued by such common endemic diseases as measles, tuberculosis, hepatitis, tetanus, whooping cough, and diphtheria, long since eradicated in the developed countries.

The new health plan, which lists 85 goals, ranging from self-sufficiency in [production of] vaccines to the eradication of neonatal tetanus, will be announced by President Fernando Collor when he returns from the United States. Confronted with the widest variety of problems in remodeling the Ministry of Health, Minister Alcene Guerra is optimistic: He is certain that he can win again, for the Brazilian people, the respect they deserve from the public health services.

Torres: How is Brazil doing with regard to immunization?

Guerra: Brazil has made notable progress against poliomyelitis in the last 10 years. In these 10 years, with the high rates of vaccination coverage, it may be said that polio has practically been eliminated in Brazil. But if this effort was noteworthy, it was also very wasteful, because, in conjunction with the polio vaccination, we could have made an effort to vaccinate the children against other diseases.

Torres: Do you think Brazil is now in a position to rid itself of those diseases considered Third World diseases, since the president is insisting that the country move into the First World?

Guerra: The president's commitment is impressive; he is determined to go to war against immuno-preventable diseases. If we maintain 90-percent coverage rates for vaccinations in the five years of the Collor administration, we will very probably have achieved the same success that we have had against poliomyelitis, virtually eradicating measles, diphtheria, whooping cough, and tetanus in Brazil.

Torres: What picture can you draw of these diseases today in Brazil? What type of population is affected the most?

Guerra: It is difficult to talk about diseases in Brazil with scientific rigor. We do not have an advanced system of epidemiological surveillance. Today we have estimates, which tell us that the measles epidemic in the Northeast is very serious, the tetanus situation is serious, as are whooping cough and diphtheria—in addition to a series of other diseases that are a national tragedy today, such as hepatitis B, in the middle and upper Amazon Region and already affecting the Northeast and Midwest, and many other immuno-preventable diseases that could already have been eradicated in Brazil if we had a serious health system.

Torres: What are the goals of the Health Ministry in the next few years?

Guerra: We have a list of 85 goals. It covers everything from self- sufficiency in [the production of] vaccines to the eradication of neonatal tetanus. The data are in the president's hands and he should divulge them in the next few days.

Torres: Can you add anything in this regard?

Guerra: I can cite some impressive data. In his five years in office, President Collor will spend more than the entire foreign debt on health.

Torres: The administrative reform imposed a personnel cut of about 30 percent in all public agencies. Will this affect your goals somewhat, since health requires personnel, particularly in patient services?

Guerra: On the contrary. We cut more than 5,000 civil servants in Rio de Janeiro and, with the cut, we added 415,000 consultations per month and put almost 1,000 empty beds back in service. We cut out the superfluous, the unnecessary services, the surplus civil servant. This generated an extraordinary improvement in service and, what's more, we are saving a billion cruzeiros per month. The entire multivaccination campaign conducted on 22 September cost one billion cruzeiros. In other words, we

are earning the equivalent of a national vaccination campaign per month in savings.

Torres: Among those 85 goals that the Collor administration intends to achieve in the health sector during its mandate, where do AIDS patients stand?

Guerra: They have the same degree of priority as all the carriers of any disease. In the health field, it is dangerous to set priorities, because you offend sensibilities. AIDS patients have priority because this disease is fatal and the life expectancy of a diagnosed AIDS patient is very short. In combating AIDS, we are now giving priority to monitoring those who are not ill, the people who have the virus, transmit the virus, but are not yet sick. These are the silent carriers and Brazil has a cataclysmic number of them. It is estimated that half a million people have the virus and are transmitting it silently, without being sick. We need to tighten control in these groups. We know that a single prostitute has about 2,000 contacts per month and does not know that she is infected.

Torres: How much is the health sector allocating to research, whether it is for malaria or AIDS?

Guerra: When I assumed the ministry, only seven percent of the Fiocruz [Osvaldo Cruz Institute Foundation] budget was applied to research. Today it applies 13 percent and by the end of the year 20 percent of its funds will be destined for research. At short range, we want to spend $300 million on Fiocruz to turn it into the largest research center in the Third World.

Torres: Project Inovar, which you launched a little while ago, has received immense criticism, mainly from pharmaceutical sectors. The pharmaceutical firms are opposed to the Inovar project. They claim that the price of medicines should not be deregulated until the national industry reaches a competitive stage, as happened in France, Japan, and Italy. Do you believe this will be prejudicial to the nation's pharmaceutical industry?

Guerra: They have not read the program. The compulsive criticism is a matter of politics. Project Inovar simply removes the bureaucratic aspect of the control and accentuates scientific research and technology. The project frees up human and material resources so that the product which the Brazilian consumes can be controlled in terms of formula and content; there will be really strict sanitary vigilance, as well. To this end, we have a central laboratory at Fiocruz and we are establishing agreements with about 300 laboratories in Brazil to exercise tighter control over the substances consumed by the Brazilians. The pharmaceutical companies have not read the program. They are criticizing trivial things, such as control over the trademark or the size, things that do not concern the consumer. The consumer is interested in knowing whether the product that he is consuming is good for him or not. This is in keeping with the strict standards demanded by developed countries and peoples.

Torres: With this deregulation of prices, the government is actually trying to do away with the cartels. But in the case of the pharmaceutical laboratories, I think the reverse is true, since they hold everything, including the raw materials.

Guerra: No, the medicines that are essential for certain groups of patients in Brazil are produced by a limited number of manufacturers—what you characterize as cartels—and they are controlled, and we have no intention of decontrolling them at short range. We must not confuse this with the liberation of patents, which is entirely different and is a matter which is being taken up by the Health Ministry, the Secretariat of Science and Technology, the Ministry of the Economy, and the Ministry of Foreign Affairs.

Torres: Does the Health Ministry have any program or project regarding the dental health of the Brazilians, since this is a nation of toothless people?

Guerra: This is our big surprise for November. We are collecting data, reevaluating all the policies, stockpiling weapons for the battle, and we will go to war by the end of the year with a revolutionary, innovative program which will turn the dental health situation around before the end of the Collor administration.

Torres: What bomb is this?

Guerra: I cannot divulge it yet because it is under technical-scientific consideration and we cannot divulge it until we are absolutely sure, because we cannot run the risk of subjecting the population to an experiment. We will have to do this with specific, real data, for a really effective program.

Torres: How is the administrative reform going in the Health Ministry?

Guerra: With regard to personnel, we have already completed the administrative reform. Regarding reform in terms of internal remodeling, with the creation of agencies and the transfer of sectors from one to another, this depends on approval of the Organic Law of Health, because this law will determine the activity of the ministry. We cannot implement a radical administrative reform as needed before we know if the law authorizes it, because, if we effect some type of reform now, once the law is approved we might have to do something different, so it would be wasted effort.

Torres: The DIARIO OFICIAL published the announcement of the creation of the National Health Foundation, which will take in the SUCAM [Superintendency for Public Health Campaigns] and the SESP [Special Service for Public Health]. What about the question of wage parity, since SESP personnel earn an average salary that is three or four times as high as that of a technician in your ministry? Why is the National Health Foundation still only on paper?

Guerra: The administrative reform that creates the National Health Foundation depends on the complete

administrative reform of the ministry, which in turn depends on approval of the Organic Law of Health. When the organic law is approved, we will have all the internal regulations in place, and the problem of wage parity is actually a problem throughout the entire health sector in Brazil. Everyone is demanding parity. We have up to six months after the law is promulgated to send the National Congress a plan for job descriptions, careers, and salaries.

Torres: After six months as minister, how would you evaluate your administration and what are your goals for the future?

Guerra: These six months have been very positive. Our program for the future—four years and six months—is ready and is on the president's desk. It includes all the actions of the Health Ministry and is bolder than any previous plan. Practical examples of this are the multivaccination campaign that we conducted yesterday, the attack against dengue fever throughout the Northeast and in Rio de Janeiro, the attack on malaria, and reform of our assistance model, which most closely touches the Brazilian taxpayer. The day will soon be past when a citizen comes to an INAMPS [expansion not given] office or a state or municipal health secretariat and is poorly served, treated with indifference and subjected to an inhumane series of bureaucratic procedures. The days are numbered for this kind of thing. We have four Brazilian capitals in an advanced stage of planning, ready for the go-ahead to put it in practice. The capitals are Brasilia, Salvador, Belo Horizonte, and Porto Alegre.

Torres: To bring up the subject of payment, how are you coping with the lack of funds, pending approval of the Budget of the Union by the National Congress? Has this affected your ministry yet?

Guerra: It has. We have already had the phones cut off twice. We are not making any investments except for those that have already been approved by the National Congress. This month we can still pay the hospitals and the municipal governments; I do not know how it will be next month. At least one recommendation has already been made to the ministry employees: next month they should bring toilet paper from home.

Torres: Brasilia today has a very large influx of patients from southern Bahia, Goias, and Tocantins. How do you feel about the federal capital having a hospital, the HDB [District Hospital of Brasilia], practically destroyed by this huge demand?

Guerra: All this demand has been identified; today we know where it originates and investments are being made at the source. Brasilia's public health system is badly deteriorated because of a succession of terrible administrations in terms of management in recent years.

Hemorrhagic Dengue Outbreak Threatens Niteroi

90WE0024C Rio de Janeiro O GLOBO in Portuguese 28 Sep 90 p 16

[Text] Half the population of Niteroi runs the risk of contracting hemorrhagic dengue next summer. Analyses of blood samples conducted by the Municipal Secretariat of Health confirm that 60 percent have one type of the disease and are likely to develop the hemorrhagic dengue syndrome, which can be fatal.

According to Secretary Gilson Cantarino, it is time to dispel the myth that dengue is a benign disease; once infected with any one of the four types, an individual can develop hemorrhagic dengue, which, when not fatal, can have lasting consequences for the organism. In 1986, some 6,571 cases of dengue were reported in Niteroi; the figure jumped to 12,073 cases the following year. Only 362 cases were reported in 1988 and only 92 cases in 1989. From January to August of this year, however, the incidence of the disease rose again; there were 1,649 cases of dengue in Niteroi, 17 of which were of the hemorrhagic type, resulting in three deaths.

To discuss methods of combating dengue and meningitis, as well as health policy, the Havana-Niteroi International Health Forum was convened yesterday. Cuba suffered dengue epidemics in the 1970s and 1980s and today is maintaining strict control to prevent the disease. The conclusions of the secretariat with regard to dengue will be presented to the Forum tomorrow. During the opening session, Maria Manuela Alves Santos, state secretary of health, said she did not believe there would be a dengue epidemic next summer, in view of the efforts to eliminate the foci of the Aedes Aegypti mosquito, the transmitting agent. Maria Manoela said she had confidence in the efficiency of the sanitary guards being trained by the municipalities. She also assured that the state will be in a position to treat the patients, despite the scanty support from the Health Ministry.

"If we could not count on the assistance of the Armed Forces, it would be difficult to eliminate the foci. The funds promised by the Health Ministry in May were for the purchase of equipment, which has not arrived here yet," she commented.

Today the Forum will discuss vaccination against meningitis—including the Cuban experience—and will analyze the clinical aspects of dengue and methods of treatment.

Amazonia Colonization Sparks Additional Disease

91WN0032B Sao Paulo O ESTADO DE SAO PAULO in Portuguese 11 Oct 90 p 22

[Article by Alvaro Caropreso]

[Text] Manaus—The disorderly process of colonization in the last 20 years has brought diseases to the Amazon Region that were once rare in the area, such as Chagas disease and schistosomiasis, which are already on the

way to becoming endemic. The warning comes from researchers of the Oswaldo Cruz Institute (Fiocruz) in Rio de Janeiro, who were in Manaus for the First International Symposium on Environmental Studies in Tropical Forests (Forest'90). The Fiocruz figures confirm the data worked up last month by epidemiologist Adelson Almeida de Souza, of the Evandro Chagas Institute (IEC) of Belem.

According to a document drafted by a group of Fiocruz scientists, the small number of cases of Chagas disease reported in the Amazon Region does not rule out the danger of its becoming endemic. This is primarily because the uncontrolled deforestation and colonization have destroyed the ecological balance between the so-called "reservoir animals"—certain species of monkeys which carry the trypanosoma cruzi protozoa—and the vectors, insects of the "barber bug" family (Panstrongylas megistus), which transmit the disease to humans.

According to the Fiocruz document, deforestation has led some species of reservoir hosts, such as marsupials, to become adapted in areas close to centers of colonization, as their only way to find food. Moreover, the migration of infected populations from other areas of the country has contributed to increasing the endemic risk.

According to the scientists, there is a relation between the sylvan cycle of the disease—with native reservoir hosts and vectors—and the domestic cycle, imported through colonization and spread via the system of highways built since the 1970s.

The result is a growing number of autochthonous cases, involving individuals who were born in the northern part of the country and have never left their region of origin. According to researcher Almeida de Souza, of the IEC, in 1969 four cases [of Chagas disease] were recorded on the outskirts of Belem. Between 1969 and 1988, the IEC registered 17 more cases. From 1988 to 1990, however, the number of cases jumped to 16—a large number for an interval of only two years.

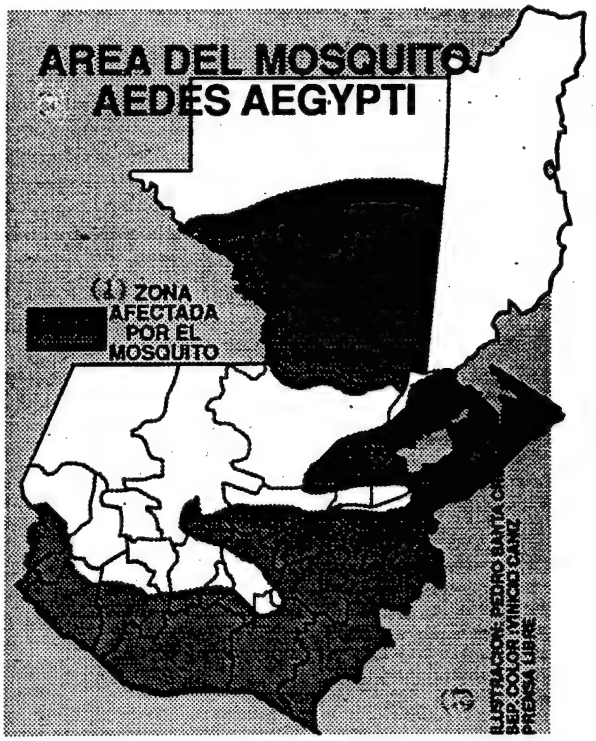
In Amapa, the first autochthonous case of Chagas disease was recorded in 1977. In 1983, there were eight cases in the environs of Acapa alone; from 1988 to 1980, there were three more cases in the same area. In Amazonas, nine cases were recorded between 1977 and 1985, and there was a case in Acre in 1984, all autochthonous.

GUATEMALA

Dengue Epidemic Reaches 'Alarming' Proportions

91WE0037A Guatemala City PRENSA LIBRE in Spanish 9 Oct 90 p 14

[Text] Deputy Miguel Angel Montepeque Contreras, from the Congress of the Republic Commission on Health, claimed that the dengue epidemic is striking nearly the entire national territory, and the Ministry of Public Health lacks resources for counteracting its effects.



Area of the Aedes Aegypti Mosquito
1. Zone affected by the mosquito

He said that, on the southern coast, there are many cases of dengue, a viral disease transmitted by the Aedes aegypti mosquito and initially manifested with fever, general malaise, muscular pain, and skin eruption.

Montepeque Contreras maintained that, if this situation persists, next year the number of cases will increase and the consequences will be disastrous, because the Health Ministry lacks the 4,000 quetzales that a barrel of insecticide costs.

Congressman Montepeque noted in conclusion that there is an urgent need for the government to intervene in the matter, to prevent a situation that is acquiring alarming proportions.

JAMAICA

Health Department Identifies Sources of Typhoid Fever

FL3110224690 Bridgetown CANA in English 2203 GMT 31 Oct 90

[Text] Kingston—As Jamaica health officials fight to contain an outbreak of typhoid fever, the authorities in the south west coastal parish of Westmoreland have warned residents not to buy ice-cream and other foods from side-walk vendors. The health department says that it identified ice-cream, patties (a popular Jamaican meat

pie), icicles, shrimps and crabs as contributing to the spread of the disease which has already claimed eight lives.

The national news agency, JAMPRESS, reported that ice-cream has been identified in the diet of 73 percent of the positive typhoid cases, patties in 65 percent, and icicles 50 percent. Shrimps and crabs caught and/or prepared in the parish were said to be "high risk foods" because of where they are caught.

There are 114 confirmed cases of typhoid fever in Westermoreland. This is the second outbreak of the disease in less than three months.

Last week, a ban was imposed by the health department on all public gatherings of 100 people or more in the parish. The ban resulted in the cancellation of a reggae show and a national premier league football match over the week-end.

PERU

Malaria Epidemic Outbreak in Huaraz

PY0911205690 Lima EL COMERCIO in Spanish 30 Oct 90 p 1

[Summary] Dr. Jorge Agreda Ulloa, director of the Chavin Region health unit, has reported more than 40 cases of malaria in Pomabamba and Antonio Raimondi Provinces, in the Callejon de los Chonucos area.

Dr. Agreda said the outbreak cannot be controlled because local health units lack the resources to spray the areas where mosquitoes reproduce. Agreda said he had sent an urgent appeal to Lima for DDT and medicines.

BANGLADESH

'Alarming' Spread of Malaria in District

91WD0112 Dhaka THE BANGLADESH OBSERVER in English 22 Sep 90 p 9

[Text] Maulvibazar—Malaria has broken out in the six upazilas of Maulvibazar district. People living in different tea gardens along the border were attacked with malaria.

According to an official source, from January to July last a total of 1,114 malaria patients have been found in the district.

The source added that blood examination of 20,909 persons were conducted during this period. The result of blood examination are not available still now.

It may be mentioned here that mosquito menace has assumed an alarming proportion in the district. Drains and ditches covered with garbages, stagnant water and ponds with luxuriant growth of water hyacinths and uncleaned jungles around the dwelling houses helped increase mosquito menace.

Increase in Burguer's Disease Said to Cause Panic

91WD0113 Dhaka THE NEW NATION in English 4 Sep 90 p 2

[Text] Madaripur—Burguer disease has been on the increase all over Madaripur district generating panic among the poor people.

According to Sadar hospital sources, at least 20 patients acutely attacked with the disease sought treatment during the last year. All the patients, who have little chance of recovery, were advised to get their affected legs amputated in Khulna, Barisal or Dhaka.

Reports of many other cases of Burguer disease are also coming from upazilas, the RMO, Sadar Hospital here said.

In an interview with this Correspondent, a senior consultant of the hospital, said that persons ranging between 20 to 40 years of age mostly fell victim to the disease, and 80 percent of them are male and 20 percent are female.

According to an unofficial survey conducted by this consultant, the disease is mostly found in persons who always remain barefooted and poor persons living with inadequate and poor diet. Smokers are also prone to this deadly disease.

The patients attacked with the disease loose energy fast and become inactive. Their lower limb or limbs are to be amputated when the burguer disease matures to gangrene.

To get rid of this disaster one can take precautionary measures like wearing of shoes, giving up smoking, eating a balanced diet and getting treatment at the early stage of the disease, the consultant said.

The preliminary symptoms of the disease are weakness of digestion system, pain in calf-muscle to leg, headache, weariness, restlessness and intermittant fever with cold and jerking.

A suspect of burguer disease will have complaints of claudication which will continuously increase with intensification of the disease, interalia, he will feel pain in the toe of any or both feet at a time. The pain will gradually shuttle between the toe and the knee and at one stage it will be so unbearable that a patient, to get some comfort, will clasp his feet within his hands. At this stage, a scar will be visible on the great toe of either of the two legs and the scar will start eroding and engulf the other toes.

Before the disease forms Gangrene, in the final stage of the disease a patient may be cured, by 'Lumber Sympathectomy.' But if once Gangrene is formed there is no other way than to get his leg amputated up to the knee.

The consultant said even after amputation of the leg the disease may re- appear.

IRAQ

Planeload of Swiss Medical Supplies Arrives in Baghdad

JN0111215490 Baghdad INA in Arabic 2146 GMT 1 Nov 90

[Text] A special Iraqi Boeing 707 carrying 15.5 tons of Swiss medical supplies worth approximately $9 million arrvied in Baghdad this evening.

It is to be recalled that on 28 September, the Swiss Government indicated its willingness to send medical supplies to Iraq on humanitarian grounds.

LEBANON

5 Die, 150 Hospitalized in Suspected Cholera Outbreak

NC1411185690 Beirut Voice of Lebanon in Arabic 1515 GMT 14 Nov 90

[Text] Five people died and approximately 150 others were transferred to hospitals in the 'Akkar area today after sufferring severe diarrhea which, according to medical sources in northern Lebanon, might have resulted from cholera infection. REUTER cites the same sources as saying that the dead range between 10 months and 75 years of age.

Medical sources have quoted an 'Akkar district doctor as saying that the cases resulted from water pollution. He added that a state of alert has been declared in the area's hospitals. Riyad Qawakji, acting governor of North

Lebanon, denied that he has been informed of any cholera cases in the North. He said cases of severe diarrhea have been transferred to Tripoli's government hospital. He added that it is not possible to state definitely that they are cholera cases until the laboratory test results are received. He noted that he had telephoned Prime Minister Salim al- Huss to apprise him of the situation.

Analysis Confirms Cholera Epidemic in North

NC1611131990 (Clandestine) Radio Free Lebanon in Arabic 1145 GMT 16 Nov 90

[Text] Laboratory analysis of samples taken from patients in 'Akkar and Tripoli today confirmed that the epidemic that spread in the northern areas and caused death and illness is cholera. The disease was caused by polluted drinking water, particularly in the 'Akkar District. Diarrhea, vomiting, and a drop in blood pressure also confirmed this. A state of emergency has been declared in all the medical establishments in 'Akkar and the north to confront this contagious disease.

Health Minister 'Abdallah al-Rasi said that the vaccines and medicines that are necesary for treatment could not be sent to the north yesterday due to a transportation shortage. Al-Rasi received a call from the 'Akkar District officer telling him that only 800 bags of vaccine have arrived in 'Akkar whereas the hospitals in the area require over 2,000 such bags.

More Cholera Cases, Deaths Reported in North

NC1811081090 Ihdin Radio of Free and Unified Lebanon in Arabic 0700 GMT 18 Nov 90

[Text] Regarding the health situation in the North, people infected by water pollution are still being moved to 'Akkar District's hospitals and clinics. It was reported this morning that the number of deaths has risen to 10 and of cases to 270.

Residents of the afflicted villages demonstrated yesterday in Halba. A quantity of serum has arrived in the area. Health Minister Dr. 'Abdallah al-Rasi has said that there is no grave danger as a result of the water pollution. He said that the Health Ministry is not hiding anything from the citizens. Dr. al-Rasi affirmed that there is no cholera epidemic but negative cases that constitute no danger. [sentence as heard] He noted that the danger lies in the pollution of Lebaonon's water sources as a result of the water pipelines' wearing out.

Belorussia Appeals to Union for Chernobyl Help

LD0111122490 Moscow TASS in English 1159 GMT 1 Nov 90

[By TASS correspondents Vladimir Bogdanov and Aleksandr Kryzhanovskiy]

[Text] Minsk—The Belorussian parliament has appealed to the Soviet president and parliament for help in clearing up after the Chernobyl nuclear accident.

The appeal stresses that the republic is unable to cope with this task itself. There are 400,000 children living in the polluted zone. Belorussia is able to meet only 11 percent of their requirements in special foods. The Belorussian Supreme Soviet calls for the allocation of 40 million roubles up to 1995. They will be spent on medical equipment and clean vitaminised products for the population.

The appeal to the federal parliament stresses that the lack of legislative enactments to solve vital problems in polluted territories tends to aggravate political and socio-psychological tension in the disaster areas.

The Belorussian parliament called on the USSR Supreme Soviet to amend the agenda of its current session and include these problems in it.

Riga Water Supply 'Poisoned', Pressure Drops

LD0811184190 Riga Domestic Service in Latvian 1000 GMT 8 Nov 90

[Text] The Riga Water and Sewerage Board says it is necessary to cut the water supply to the city from Daugava reservoir due to the leakage of harmful substances from the Novopolotsk polymer works.

Therefore, water pressure throughout the city has been reduced, particularly in Pardaugava, downtown Riga, Jaunmilgravis, Vecmilgravis, and (Kengarags). Water there can only reach the ground floor.

Specialists at the sanitary epidemiological station explained that the filtering of poisoned water into the city's water supply will not be allowed.

Water reaching residences in the rayons mentioned is being taken from underground water reservoirs and artesian boreholes. Even so, it is recommended that water be boiled before it is drunk.

Soviet Parasitical Disease Figures Understated

PM1311131790 Moscow IZVESTIYA in Russian 12 Nov 90 Union Edition p 6

[Article by S. Tutorskaya: "Doctors Alarmed at Growth in Parasitic Diseases"]

[Text] Western press commentary has been sounding the alarm about the WHO report on the worldwide growth in parasitic diseases.

No less than 500 million people are suffering from parasitic diseases. The largest rise has been in malaria (270 million people a year). It is noted that serious parasitic diseases are more common in places where sanitation standards are poor. Incompetent farming can lead to an increased risk of infection. And, unfortunately, serious outbreaks are a sorry and unavoidable concomitant of sedition and civil war...

What is the situation in our country? According to figures from V. Sergiyev, director of the Institute of Medical Parasitology, 4.5 million people are affected every year. We do not have any complete state statistics. For instance, we used to have an antimalaria service. But it was closed down after the war owing to the success in the fight against malaria. But malaria has not been "closed down" worldwide... V. Sergiyev says that malaria is now being brought in apace from Afghanistan.

Given that there are virtually no courses in parasitology in medical schools and that not all laboratories have modern detection methods, very very many cases in our country go unrecorded. Not so long ago a severely ill man with a chronic leg sore contacted the institute. The possibility of amputation was raised. An analysis at the institute established that the sore had been caused by a tiny parasite that lives in various animal and human soft tissues. After a course of treatment everything was fine.

The institute wondered by how many the number of people suffering from parasitic diseases exceeds the official figures. The answer turned out to be by a factor of 2-3 times for some diseases, and by a factor of even 15-17 times for others. On average, the scientists concluded that the number of sufferers was 10 times higher. That is, equivalent to 45 million rather than 4.5 million.

The doctors are very concerned about the growth in disease as a result of the use of polluted unboiled water. Furthermore, animal husbandry and the keeping of household pets requires a knowledge of elementary rules. The solution is to set up a network of laboratories where fish and meat can be checked.

More active coverage of sanitation is also needed. And useful information will hurt nobody: Well-cooked meat and fish are harmless...

Is it not time to immediately set up the necessary services and to train doctors and develop laboratories properly? And not to forget the following: The official statistics need to be multiplied by 10 to be accurate.

Outbreak of Plague in Uzbekistan 'Localized'

PM1511100590 Moscow PRAVDA in Russian 14 Nov 90 Second Edition p 6

[UZTAG-TASS report: "Plague Infection Localized"]

[Text] An outbreak of plague has been localized as a result of emergency measures taken by doctors.

On the night of 6 November construction worker Kolodtsev died in Bukhara Oblast hospital. Doctors determined the cause of death—a septic form of plague, complicated by pneumonia. It was established that the victim had been sinking wells near the central farmstead on the "Avangard" sovkhoz, in Uchkudukskiy Rayon. There was a serious epidemic of plague among the rodent population there. Rodent fleas had gotten onto a cat that lived in the caravan where the worker was living. It was a fleabite that led to the tragedy.

More than 30 people who had been in contact with the patient were isolated. Preventive treatment was administered and they are all well, 19 of them having even been discharged from hospital. Doctors are keeping all those living in the area of the epidemic under observation. They have been given vaccinations. The area has been disinfected and the rodents which carry the infection are being destroyed. Hunting of foxes, hares, jackals, wolves, and rodents has been banned in affected areas.

The plague outbreak has been localized, but doctors are on the alert—you don't trifle with plague.

PRAVDA Corrects Plague Report From 14 Nov

PM1511144990 Moscow PRAVDA in Russian 15 Nov 90 Second Edition p 3

[Report by G. Galina under the rubric "Fact and Commentary": "The Plague Did Not Feast for Long"]

[Text] A small report carried by certain newspapers recently on a case of the plague in the First City Hospital has really alarmed people. It spoke of the organization of a whole package of anti-epidemic measures designed to protect the capital against dangerous infection.

A squall of readers' telephone calls hit the editorial office: "The plague is on our threshold, but PRAVDA stays silent..."

We telephoned G. Onishchenko, deputy chief of the USSR Health Ministry Main Administration of Quarantinable Infections.

"There are no grounds for panic," he said. "The plague diagnosis in the Moscow clinic has not been confirmed. All the anti-epidemic measures have now been curtailed.

"As regards reports from other parts of the country, particularly from Uzbekistan, the facts have been confirmed. But it should not be forgotten that 210 million hectares of our territory have always been a potential seat for a plague outbreak—only previously people kept quiet about this. It is another matter that, in raising the veil of secrecy, none of us must forget about accuracy..."

Agreeing with Gennadiy Grigoryevich, we applied that rebuke to ourselves too. Unfortunately, there was an inaccuracy in the report "Plague Infection Localized," carried in PRAVDA yesterday. The man who died of the plague in Uchkuduk—his name is not known—was erroneously named as Kolodtsev. In fact, he is a builder of wells [kolodtsy] by trade.

Formaldehyde Pollution Forces School Closure

PM1511150590 Moscow IZVESTIYA in Russian 10 Nov 90 Union Edition p 2

[V. Kulagin report: "Poison—In Apartments"]

[Text] Kursk Oblast Epidemiological Station has decided to close a school and a kindergarten in a gas workers' settlement.

About 100 specialists who operate the Kursk sector of the Urengoy-Pomary-Uzhgorod gas pipelines have been living here with their families for almost five years. The settlement, consisting of prefabricated houses with a complete social and domestic infrastructure, was purchased in Finland. What has happened in this comfortable, compact, and clean settlement?

"We received the first alarm signal from the residents of this settlement in April of this year," Nikolay Shishkov, head of the communal hygiene department of the oblast epidemiological station, relates. "We carried out an analysis of the air in five apartments in two houses to begin with. We discovered formaldehyde concentrations two to four times in excess of the maximum permissible levels. A month later we carried out repeat tests, broadening the zone of investigation. In one apartment a concentration was recorded of this substance, which is dangerous for people's health, eight times in excess of the maximum permissible level. Then we took another two tests, including at the school, kindergarten, and workers' hostel. In spite of a significant incoherence in the readings at various facilities, the overall picture was alarming: Maximum permissible formaldehyde levels were exceeded by up to 18 times.

A departmental commission was set up under the RSFSR [Russian Soviet Federated Socialist Republic] Ministry of Health, State Committee for Construction, and the "Gazprom" concern. However, the oblast epidemiological station resolved to close the school and the kindergarten on the territory of the settlement without waiting for the commission's conclusions.

Vladimir Tyurenkov, construction affairs adviser to the oblispolkom [oblast soviet executive committee] chairman, told me by telephone that a similar situation had emerged in a number of other comparable settlements all along the route of the gas pipelines from Western Siberia to the USSR's western border.

"First of all, we should by no means cast a cloud over the reputation of the well-known Finnish firm "Engineers," which supplied these houses," V. Tyurenkov explains. According to the medics' conclusions, the concentration of formaldehyde in the settlement's premises is completely safe for tour-of-duty teams. But they were not designed for permanent residence. It was in our country that this extremely important condition was neglected, and now all the inhabitants of the gas workers' settlement will have to be resettled elsewhere."

CANADA

Whooping Cough in Quebec, Ontario, Alberta

91WE0043 Toronto THE GLOBE AND MAIL in English 26 Sep 90 p A4

[Article by Patricia Poirier: "Outbreak of Whooping Cough Hits Montreal"]

[Excerpts] Montreal—An outbreak of whooping cough in Montreal underscores the fact that immunization of school-age children is not compulsory in Quebec, doctors at the city's largest children's hospital say.

The Hospital Saint-Justice says it has treated 240 cases of whooping cough since August, a significantly larger number than in previous years.

Montreal's Sick Children's Hospital has reported 41 cases of whooping cough since August, also a significantly larger number of cases than at the same period last year.

"There is no panic," insisted Dr Louis Geoffroy, one of the Sainte-Justice emergency room pediatricians who has treated many of the sick children.

However, the situation is worrisome, he told a news conference yesterday.

And that's because not all Quebec children have been vaccinated against the disease which is highly contagious and can lead to death, especially in infants.

The majority of people diagnosed as having whooping cough—most were children—had been immunized, said Dr Geoffroy, adding that the effectiveness rate for the vaccine is between 80 percent and 90 percent.

"If they had not, the whooping cough outbreak would be 10 times worse," he said.

Ontario Health Department spokesman Maurice Jones said yesterday there has been an increase in the number of whooping cough cases in the Toronto area, in the southwest and the eastern part of the province, although he could not provide any statistics.

"It's not an epidemic, it's an outbreak," he said.

Meanwhile, almost 100 cases of whooping cough were reported in Alberta last month—near the number usually registered for an entire year, says the provincial epidemiologist, in a Canadian Press report.

Study Shows Pulp Mill Workers More Prone to Rare Cancer

91WE0042 Vancouver THE SUN in English 5 Oct 90 p A15

[Article by Glenn Bohn, SUN Environment Reporter]

[Excerpts] B.C. pulp mill workers are two to three times more likely to be afflicted with a rare cancer than other British Columbians, a B.C. Cancer Agency survey has found.

The cancer is non-Hodgkin's lymphoma, a sometimes-fatal cancer that U.S. researchers have linked with occupational exposure to the chlorine-based pesticide 2,4-D and chlorine-based chlorophenol wood preservatives. [passage omitted]

The B.C. study is described in last month's volume of Recent Results in Cancer Research, published in Germany.

Richard Gallagher, acting head of the B.C. Cancer Agency's epidemiology division, said the findings are based on a questionnaire given to newly diagnosed cancer patients.

Their answers suggest that pulp mill workers were two to three times more likely to have non-Hodgkin's lymphoma than the general population.

Similar higher-than-average risks for pulp mill workers were uncovered by the cancer agency several years ago.

In the earlier study, researchers looked at all B.C. death certificates from 1950 to 1984, the stated cause of death and the person's occupation. Once again, there seemed to be a two- or three-fold risk that pulp workers would have non-Hodgkin's lymphoma.

Gallagher emphasized that the new study found only five B.C. pulp mill workers have died from non-Hodgkin's lymphoma, so the cancer risk assessment was based on small numbers. Such studies do not prove that something in pulp mills is causing this type of cancer, he said.

"Nobody wants to jump the gun with anything like this," Gallagher said.

When asked how worried pulp mill workers should be, Gallagher replied: "They should probably be concerned, but probably not alarmed. We're talking about a very small number of cases...I know it sounds like I'm hedging, but I am."

Renate Kroesa, a Greenpeace employee and industrial chemist, said the cancer agency's finding should come as no surprise, because other studies in the United States and Sweden have already linked chlorophenol and dioxins to non-Hodgkin's lymphoma.

Kroesa renewed the international environmental group's call for an end to chlorine bleaching in pulp mills.

Dr Pierre Band, head of the cancer agency's epidemiology division, who is on sabbatical in Montreal, said he has proposed a third, more extensive study.

"Both (studies) point in the same direction," Band said in an interview from Montreal. "Consequently, it adds credibility to the findings and strengthens the recommendation that a cohort study be carried out."

Band said he is seeking the pulp and paper industry's cooperation and approaching cancer research funding agencies for the study. He said perhaps 50,000 people may have worked in B.C. pulp mills since 1950.

The cohort study would identify a large group of pulp mill workers, examine their work histories to try to determine what chemicals they might have been exposed to and find out what illnesses they have suffered.

Band estimated the cost would be $200,000 to $300,000 per year over two or three years. [passage omitted]

GREECE

TB Recrudescence, Hepatitis Rate Noted

91WE0041A Athens I KATHIMERINI in Greek 20 Oct 90 p 5

[Article by Galini Foura]

[Text] A medical team of the University of Ioannina has pinpointed an outbreak of tuberculosis among children in Ipiros. Data on this outbreak was presented yesterday at the first day's session of the 19th Annual Mediterranean Congress organized by various pediatric associations of countries of the Middle East and Mediterranean region. The chairman is Professor N. Matsoniotis.

As revealed at the meeting, the frequency of tuberculosis among children is greater in Ipiros than in other parts of Greece and West Europe, that is 24 in 100,000 children have been affected. In fact, in certain regions tuberculosis frequency reaches 33 in 100,000 children. During 1984-89, 117 cases among children were found, while according to concrete data it has been determined that no drop has occured in the past six years.

The problem is centered more among those between 10 and 14 years of age without distinction between boys and girls. Source of the infection are adults, primarily the father (41 percent of the cases) but also other family members.

Doctors at the Pendheli Children's Hospital have announced the results of a study on the frequency of hepatitis among gypsies in Attiki. Some 86.2 percent of the gypsies tested positive in Hepatitis A, while 17.2 to 50 percent tested positive in Hepatitis B.

These percentages are very high and necessitate the taking of immediate measures. Another study by the Infectious Diseases Division of the Aghia Sofia Children's Hospital has shown that 40 percent of the health personnel do not have diphtheria antibodies available. It has been determined that revaccination is needed at the age of 12, something that is not often stressed by pediatricians.

One good piece of news: Cases of meningitis have dropped in the past few years. A total of 182 cases were reported in the two-year period 1978-79.

The major health problems faced by Greek children are tooth ailments, lung diseases, accidents, anemia, and behavior problems.

With regard to infant mortality, it is much less in Greece than in other countries such as Jordan, Egypt, and Morocco but quite higher than the UAE. In other words, 14.6 percent versus 65 percent inn Egypt, 50 percent in Jordan, 91 percent in Morocco, and 11.3 percent in the UAE.

NORWAY

Seven Tuberculosis Cases in Honningsvag/Hammerfest

91WE0013A Oslo ARBEIDERBLADET in Norwegian 17 Sep 90 p 7

[Article by Jarle R. Martinsen and Anita Midtun: "Tuberculosis Epidemic"—first paragraph is ARBEIDERBLADET introduction]

[Text] The once-feared contagious disease tuberculosis has struck in Honningsvag. The epidemic has caused seven people to need treatment so far.

Seventy-five percent of the population of the North Cape has been or will be tested in order to find the carriers of the disease. Tuberculosis can be fatal if those infected are not treated.

"There is no reason for panic at all," emphasizes the assisting head physician of the Hammerfest hospital, Bjorn Nordang, to FINNMARK DAGBLAD. He has had the seven patients in for treatment, of whom one was discharged over the weekend.

The method of treatment consists of isolating active carriers of the disease for two weeks and then putting them on antibiotics. All those who undergo this treatment are cured.

Enormous Effort

The doctors in Honningsvag have made a fantastic effort to wipe out the disease. After tuberculosis was discovered, everyone in the area around the single infected person was tested as well. The infection is transmitted via coughing and saliva.

In the schools, teachers and students have been tested with the Pirquet test, and all children over six months will be tested. Public employees and those who work in the commercial sector will be tested also.

Serious

"Many don't realize that they are infected, while others notice that their general condition is poor," says Nordang. Some of the cases the hospital has treated must be described as serious.

"The situation is disturbing, but we hope to be able to have a reasonable overview and control over the epidemic by Christmas," says municipal physician Erik Langfeldt of the North Cape to FINNMARK DAGBLAD (FD).

The municipal physician thinks that the reason why the North Cape is especially susceptible to tuberculosis is partly due to the great frequency of the disease during and after the war.

"The disease can flare up again after many years; it is this that is the cause of the epidemic now," Langfeldt says.

"The infection has been in the population for a long time. So it is a laborious and time-consuming task that awaits the health service on the North Cape," says Langfeldt.